C-K ASSOCIATES • L.L.C.
ENVIRONMENTAL & ENGINEERING CONSULTANTS

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BATON ROUGE, LA 70810
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LAKE CHARLES, LA
PH (337) 439-8699
FAX (337) 439-3337

December 23, 2010

original to IO-A
copy to Petro/G3/Davies
PAAR

HAND DELIVERED

Louisiana Department of Environmental Quality
Office of Environmental Services
Permits Division
602 N. Fifth St.
Baton Rouge, Louisiana 70802

Re: Title V Air Permit Application
Permit No. 1560-00027-03
LOOP LLC – LOOP LLC Port Complex
Lafourche Parish, Louisiana
Agency Interest No. 4634
PER2010 0001

Dear Permits Division:

On behalf of LOOP LLC, C-K Associates, LLC submits, in triplicate, the Title V air permit application for Permit No. 1560-00027-03.

If you have any questions or require additional information, please contact me at (225)-755-1000.

Sincerely,
C-K Associates, LLC

Mark J. Ezell
Air Quality Manager

Thursday, December 23, 2010
1:53:24 PM

RECEIPT OF CHECK

Master AI #:	4634
Name on Check:	LOOP LLC
Master File Name:	LOOP LLC - Port Complex
Check Received Date:	12/23/2010
Check Date:	12/17/2010
Check Number:	595707
Check Amount ($):	$6,286.25
Staff Entry:	DFERRAND
Date data entered:	12/23/2010
Media:	AIR
Reason:	title V permit app

Comments:

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

OFFICE OF ENVIRONMENTAL SERVICES

TITLE V/PART 70 AIR PERMIT APPLICATION

FOR

LOOP LLC Port Complex
LOOP LLC
Galliano/Leeville, Louisiana
Lafourche Parish

December 2010

Prepared By:
C-K Associates, LLC
17170 Perkins Road
Baton Rouge, LA 70810
(225) 755-1000

C-K Associates' Project No. 5510A

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SECTION 1.0

INTRODUCTION

1.0 INTRODUCTION

This Application for Approval of Emissions (AAE) and Emissions Inventory Questionnaire (EIQ) are being submitted by LOOP LLC (LOOP) for modification of the existing Clovelly Dome Storage Terminal in Lafourche Parish, Louisiana. The facility is under the LOOP LLC Port Complex, which includes a Marine Offloading Terminal, a crude oil pipeline interim storage facility.

The LOOP LLC Port Complex is a minor source of Criteria and LAC 33:III Chapter 51 Toxic Air Pollutants. The facility currently operates under State Permit No. 1560-00027-03 issued June 12, 2007. A copy of the current permit can be found in Appendix A. With this modification application, LOOP is requesting a Title V permit for the LOOP LLC Port Complex.

This application was prepared in accordance with LAC 33:III Chapter 5. The application Completeness Checklist for Part 70 Operating Permits is included as Appendix B. As required under LA R.S. 30:2018, the Environmental Assessment Statement is included as Appendix C.

1.1 FACILITY DESCRIPTION

LOOP LLC Port Complex (LOOP Complex) is located in Lafourche Parish, Louisiana and the Gulf of Mexico. The LOOP Complex consists of the Clovelly Dome Storage Terminal in Galliano, the Small Boat Harbor in Leeville, the Fourchon Booster Station in Leeville, and Marine Offloading Terminal in Grand Isle Block 59, Gulf of Mexico. Figure 1 depicts the site locations of the three land based facilities relative to each other.

The LOOP Complex is currently permitted for a capacity of 59.4 million barrels (MMbbls) of crude oil storage, including caverns and tanks. The Clovelly Dome Storage Terminal consists of nine underground storage caverns. These caverns provide storage for oil prior to pipeline delivery. Eight of the caverns have a capacity of approximately 6 MM barrels of oil, and one cavern has a capacity of 3 MM barrels of oil. The Terminal also consists of surface facilities located in the same general vicinity which include a Brine Storage Reservoir, Operations Building, crude oil storage tanks, fuel and slop oil tanks, emergency generators, and ancillary equipment. The Small Boat Harbor, located on Bayou Lafourche, shelters crew and work boats and includes hose testing facilities. The Fourchon Booster Station is a secured unmanned facility with two large diesel storage tanks and a few small storage tanks. Emission control systems utilized at the LOOP Complex facilities include the latest storage tank technology, mechanical seals on pumps, and low sulfur fuel oil.

1.2 PROJECT DESCRIPTION

LOOP proposes to expand its Clovelly Dome Storage Terminal to include six (6) additional storage tanks and one new emergency diesel generator. The new tanks will be modeled after the existing tanks, each being an external floating roof tank and having a diameter of 310 feet. Refer to Figure 2 Plot Plan for the location of new tanks. The capacity of each of the new tanks will be 600,000 barrels. Additional capacity is 3.6 MMbbls for a total of 63 MMbbls.

Currently, the permitted throughput for the existing crude oil tank cap is 230 MMbbl/year. The emissions cap consists of both operating emissions and roof landing emissions. This cap allows LOOP to operate the storage tanks with the flexibility to increase throughput through any one tank to meet scheduling and production needs. The cap also allows for

roof landings to occur when necessary. This application presents a theoretical operating scenario of one roof landing per tank per year. Should one tank need to be landed more than once in a year or not at all, the throughput for any tank can be adjusted, accordingly.

LOOP is proposing to add six new tanks under the crude oil storage tank cap. The operating scenario presented in this application provides a total facility throughput of approximately 183 million barrels of crude oil per year. This scenario is presented as an example only. **LOOP requests that the permit not contain any explicit throughput limits or limits on frequency of roof landings and that the cap limit be based on emissions not throughput. LOOP has the flexibility to vary these parameters as operational requirements dictate under the constraints of the permit limit for the cap.**

In preparation of this permit application, existing permitted emission sources were evaluated for operational parameters, emission calculation methodology, and speciation profile in addition to proposed sources. All source calculations are provided in Appendix D.

Provided below is an overview of the changes proposed in this application:

- The addition of six new crude oil storage tanks;
- The addition of one new emergency generator engine;
- Additionally landing losses for crude oil storage tanks;
- Revised fugitive emissions;
- Revised crude oil RVP from 5 to 8;
- Revised landing loss calculations based on RVP 8;
- Reconciled tank fittings to as-built;
- Delete EQT005 turbine generator and EQT010 fire pump engine;
- Reconciled engines per field verification, including an updated source description. Emissions based on appropriate AP-42 chapter, according to size; and
- Updated the Insignificant Activities list.

1.3 EMISSION SOURCES AND CALCULATION METHODOLOGY

Emission sources included in this permit application include the salt dome caverns and brine storage reservoir, storage tanks, fuel tanks, pump and generator engines, and fugitive emissions.

Calculation methodology follows the latest EPA TANKS Program Version 4.0.9d, Water9 Program software, and AP-42 Emission Factors. Roof landing losses are calculated based on guidance from AP-42 Chapter 7.1 Organic Liquid Storage Tanks and API Technical Report 2567, *Evaporative Loss from Storage Tank Floating Roof Landings*. Emission calculations can be found in Appendix D, including detailed report printouts from TANKS 4.0.9d. Please note that VOCs toxics have been speciated in accordance with EPA's TANKS 4.0.9d, where appropriate.

LAC 33:III.501.B.5 Insignificant Activity List

In accordance with LAC 33:III.501.B.5, certain activities are approved by the permitting authority as insignificant on the basis of size, emission or production rate, or type of pollutant. As specified by LAC 33:III.517, where applicable, those activities listed in Part A of the Insignificant Activities List must be listed in the facility's permit. Below outlines the Insignificant Activities Based on Size or Emission Rate as it applies to the LOOP Complex.

A-1 *External combustion equipment with a design rate greater than or equal to 1 million Btu per hour, but less than or equal to 10 million Btu per hour, provided that the aggregate emissions from all such units listed as insignificant do not exceed five tons per year.*

Not applicable to the LOOP Complex.

A-2 *Storage tanks less than 250 gallons storing organic liquids having a true vapor pressure less than or equal to 3.5 psia, provided that the aggregate emissions from all such organic liquid storage tanks listed as insignificant do not exceed five tons per year, do not exceed any Minimum Emission Rate listed in LAC:33.III.5112, Table 51.1, and do not exceed any hazardous air pollutant de minimis rate established pursuant to Section 112(g) of the federal Clean Air Act.*

LOOP LLC has identified three (3) storage tanks less than 250 gallons storing organic liquids having a true vapor pressure less than or equal to 3.5 psia. These tanks are presented in Appendix D, Insignificant Activities emission calculations. Aggregate emissions are well below five tons per year, do not exceed any MER, and do not exceed any HAP de minimis rate.

A-3 *Storage tanks less than 10,000 gallons storing organic liquids having a true vapor pressure less than 0.5 psia, provided that the aggregate emissions from all such organic liquid storage tanks listed as insignificant do not exceed five tons per year, do not exceed any minimum emission rate listed in LAC 33:III.5112, Table 51.1, and do not exceed any hazardous air pollutant de minimis rate established pursuant to Section 112(g) of the federal Clean Air Act.*

LOOP LLC has identified thirteen (13) storage tanks less than 10,000 gallons (inclusive of A-2 tanks) storing organic liquids having a true vapor pressure less than or equal to 0.5 psia. These tanks are presented in Appendix D, Insignificant Activities emission calculations. Aggregate emissions are well below five tons per year, do not exceed any MER, and do not exceed any HAP de minimis rate.

A-4 *Emissions of any inorganic air pollutant that is not a regulated air pollutant as defined under LAC 33:III.502, provided that the aggregate emissions from all such pollutants listed as insignificant do not exceed five tons per year.*

Not applicable to the LOOP Complex.

A-5 *External combustion equipment with a design rate less than 1 million Btu per hour.*

Not applicable to the LOOP Complex.

A-6 *Emissions from laboratory equipment/vents used exclusively for routine chemical or physical analysis for quality control or environmental monitoring purposes, provided that the aggregate emissions from all such equipment vents considered insignificant do not exceed five tons per year, do not exceed any minimum emission rate listed in LAC 33:III.5112, Table 51.1, and do not exceed any hazardous air pollutant de minimis rate established in accordance with Section 112(g) of the federal Clean Air Act.*

The LOOP Complex may engage in routine chemical or physical analysis for quality control or environmental monitoring purposes. Aggregate emissions will not exceed five tons per year, will not exceed any minimum emission rate listed in LAC 33:III.5112, Table 51.1, and

will not exceed any hazardous air pollutant de minimus rate established in accordance with Section 112(g) of the federal Clean Air Act.

A-7 *Noncommercial water washing operations of empty drums less than or equal to 55 gallons with less than 3 percent of the maximum container volume of material.*

The LOOP Complex may water wash empty containers less than or equal to 55 gallons containing less than three percent of the maximum container volume. These activities may occur at any time throughout the calendar year.

A-8 *Portable fuel tanks used on a temporary basis in maintenance and construction activities, provided that the aggregate emissions from all such tanks listed as insignificant do not exceed five tons per year.*

The LOOP Complex may use portable fuel tanks on a temporary basis for maintenance and construction activities. Aggregate emissions from all such tanks listed as insignificant will not exceed five tons per year.

A-9 *Emissions from process stream or process vent analyzers, provided that the aggregate emissions from all such analyzers listed as insignificant do not exceed five tons per year, do not exceed any minimum emission rate listed in LAC 33:III.5112, Table 51.1, and do not exceed any hazardous air pollutant de minimis rate established in accordance with Section 112(g) of the federal Clean Air Act.*

Not applicable to the LOOP Complex.

A-10 *Storage tanks containing, exclusively, soaps, detergents, surfactants, waxes, glycerin, vegetable oils, greases, animal fats, sweetener, molasses, corn syrup, aqueous salt solutions, or aqueous caustic solutions, provided an organic solvent has not been mixed with such materials, the tanks are not subject to 40 CFR 60, Subpart Kb or other federal regulation, and the aggregate emissions from all such tanks listed as insignificant do not exceed five tons per year, do not exceed any minimum emission rate listed in LAC 33:III.5112, Table 51.1, and do not exceed any hazardous air pollutant de minimis rate established in accordance with Section 112(g) of the federal Clean Air Act.*

Not applicable to the LOOP Complex.

A-11 *Catalyst charging operations, provided all such operations listed as insignificant do not exceed five tons per year, do not exceed any minimum emission rate listed in LAC 33:III.5112, Table 51.1, and do not exceed any hazardous air pollutant de minimis rate established in accordance with Section 112(g) of the federal Clean Air Act.*

Not applicable to the LOOP Complex.

A-12 *Portable cooling towers used on a temporary basis in maintenance activities, provided that the aggregate emissions from all such cooling towers listed as insignificant do not exceed five tons per year, do not exceed any minimum emission rate listed in LAC 33:III.5112, Table 51.1, and do not exceed any hazardous air pollutant de minimis rate established in accordance with Section 112(g) of the federal Clean Air Act.*

Not applicable to the LOOP Complex.

1.4 REGULATORY APPLICABILITY

Provided herein, is a brief description of applicable state and federal air quality regulations for the LOOP Complex. For a comprehensive analysis, including monitoring, reporting, and recordkeeping requirements, please refer to Section 2.0 Regulatory Tables 1-4 in form item number 23.

Louisiana Administrative Code

Chapter 5 Permit Procedures

The provisions of this Chapter apply to the owner or operator of any source which emits or has the potential to emit any air contaminant in Louisiana. This Chapter dictates permitting procedures under the State permitting program and the federal Title V permitting program, including New Source Review procedures.

The LOOP LLC complies with all applicable provisions of this Chapter in a timely and forthcoming manner.

Chapter 9 General Regulations of Control of Emissions and Emission Standards

Under this Chapter, emission standards are set at levels of air quality for the protection of public health and of public welfare from any known or anticipated adverse effects of air contaminants.

Air pollution control facilities should be installed whenever practically, economically, and technologically feasible. Control facilities shall be operated and maintained in proper working order to ensure the reduction of emissions to the atmosphere, as designed. Unauthorized discharges of any air pollutant into the atmosphere shall be promptly reported and in accordance with the provision in this Chapter.

The LOOP LLC complies with all applicable provisions of this Chapter in a timely and forthcoming manner.

Chapter 11 Control of Emissions of Smoke

This Chapter regulates control of emissions of smoke through establishing opacity limitations from combustion units. Regulations also dictate that outdoor burning of waste material or other combustible material and impairment of road visibility is prohibited.

The LOOP LLC complies with all applicable provisions of this Chapter in a timely and forthcoming manner.

Chapter 13 Emission Standards for Particulate Matter

All reasonable precautions shall be taken to prevent particulate matter from becoming airborne. These precautions shall include but not be limited to use of water or chemicals for control of dust, covering of open-bodied trucks transporting materials likely to become airborne, and paving roadways and maintaining them in a clean condition. LOOP has the general requirement to control the shade or appearance of particulate emissions to less than 20% average opacity, except for one 6-minute period in any 60 consecutive minutes.

The LOOP LLC complies with all applicable provisions of this Chapter in a timely and forthcoming manner.

Chapter 15 Emission Standards for Sulfur Dioxide

Chapter 15 establishes emissions limitations on new or existing sulfuric acid production units, new or existing sulfur recovery plants, and all other single point sources that emit or have the potential to emit 5 tons per year or more of sulfur dioxide into the atmosphere.

EQT005, Turbine Generator (7-78) has the potential to emit 5 tons per year or more of sulfur dioxide into the atmosphere and therefore, is subject to the requirements of this Chapter. The LOOP Complex complies with all applicable provisions of this Chapter in a timely and forthcoming manner.

Chapter 21 Control of Emission of Organic Compounds

Chapter 21 addresses such activities as control of emissions of organic compounds from storage tanks, fugitives, and best practical housekeeping and maintenance practices of organic compound emissions.

The LOOP LLC complies with all applicable provisions of this Chapter in a timely and forthcoming manner.

Chapter 51 Comprehensive Toxic Air Pollutant Emission Control Program

The provisions of this Chapter apply to the owner or operators of any major source, as defined in this Chapter. A major source is any stationary source (including all emission points and units of such source located within a contiguous area and under common control) of pollutants that emits, or has the potential to emit, in the aggregate, 10 tons per year or more of any toxic air pollutant (TAP) listed in Table 51.1 or 25 tons per year or more of any combination of TAPs listed in Table 51.1.

The LOOP LLC is not considered a major source and is therefore not subject to the requirements of Chapter 51.

Chapter 56 Prevention of Air Pollution Emergency Episodes

Chapter 56 addresses preparation of standby plans for the reduction of emissions during periods of Air Pollution Alert, Air Pollution Warning and Air Pollution Emergency. Standby plans shall be designed to reduce or eliminate emissions in accordance with the objectives set forth in LAC 33:III.5611 Tables 5, 6, and 7. When requested by the LDEQ, the LOOP Complex shall prepare and submit a standby plan according to the action level declared. The facility shall have 30 days from the date of request to submit the plan.

The LOOP LLC complies with all applicable provisions of this Chapter in a timely and forthcoming manner.

Chapter 59 Chemical Accident Prevention and Minimization Consequences

Owners and operators of stationary sources producing, processing, handling, or storing substances listed in 40 CFR 68.130, Table 59.0 of this Chapter, or Table 59.1 of this Chapter in quantities greater than the threshold quantities listed in those respective places, have a general duty in the same manner and same extent as Section 654 of Title 29 of the

US Code (OSHA) to identify hazards that may result from accidental releases of such substances using appropriate hazard assessment techniques, to design and maintain a safe facility, and to minimize the off-site consequences of accidental release of such substances that do occur.

The LOOP Complex does not handle listed substances in quantities greater than applicability threshold and therefore, not applicable to this Chapter.

Code of Federal Regulations

New Source Performance Standards (NSPS) (40 CFR Part 60)

Subpart A General Provisions

This subpart contains general notification, recordkeeping, and monitoring requirements that apply to any source subject to any NSPS regulation, unless the NSPS regulation specifically exempts the source from the provisions of this subpart.

LOOP LLC complies with all applicable provisions of this Chapter in a timely and forthcoming manner.

Subpart Ka Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification commenced after May 18, 1978, and Prior to July 23, 1984

The existing crude oil storage tank, Emission Point 1-78 is subject to this part. This tank is equipped with an external floating roof that meets all of the requirements of Subpart Ka.

Subpart Kb Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984

The existing crude oil storage tanks, permitted under the existing tank cap (GRP003) are subject to this part, as will be the six new tanks. Each crude oil storage tank is equipped with an external floating roof that meets all of the requirements of Subpart Kb.

Subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

The proposed emergency engine will be subject to the emission standards under this Subpart. The engine will be equipped with non-resettable hour meter.

LOOP LLC shall comply with all applicable operating, monitoring, reporting, and recordkeeping requirements provided in this Subpart.

National Emission Standards for Hazardous Air Pollutants (NESHAP) (40 CFR 63)

Subpart A General Provisions

This subpart contains general performance test, monitoring, notification, recordkeeping, reporting, and control device requirements that apply to any source subject to any Part 63 NESHAP regulation, unless the NESHAP regulation specifically exempts the source from the provisions of this subpart.

LOOP LLC complies with all applicable provisions of this Chapter in a timely and forthcoming manner.

Subpart ZZZZ NESHAP for Stationary Reciprocating Internal Combustion Engines

This regulation was recently revised to address existing compression-ignition engines at Major Sources of HAPs. The effective date of the rule is May 3, 2010 and facilities will have three years to comply with applicable requirements.

All stationary reciprocating internal combustion engines, existing and new, at the LOOP Complex are subject to this Subpart. LOOP LLC shall comply with all applicable provisions of this subpart in a timely and forthcoming manner.

Chemical Accident Prevention (40 CFR Part 68)

Owners and operators of stationary sources producing, processing, handling, or storing substances listed in 40 CFR 68.130 in quantities greater than the threshold quantities listed in those respective places, have a general duty in the same manner and same extent as Section 654 of Title 29 of the US Code (OSHA) to identify hazards that may result from accidental releases of such substances using appropriate hazard assessment techniques, to design and maintain a safe facility, and to minimize the off-site consequences of accidental release of such substances that do occur.

The LOOP Complex is not subject to Chemical Accident Prevention provisions and the Risk Management Program (RMP). No regulated substances are handled or stored in quantities greater than the applicable threshold, thus, an RMP is not required.

1.5 PROPOSED EMISSION CHANGES

This application and emissions estimates were prepared with the best data available at the time. Emissions proposed in the below table demonstrate Title V applicability.

TABLE 1
Facility Emissions

Pollutant	Permitted Emissions (tpy)	Proposed Emissions (tpy)	Net Change (tpy)
PM10	1.05	2.34	+1.29
SO2	22.56	1.89	-20.67
CO	1.76	10.01	+8.25
NOx	45.56	51.23	+5.67
Total VOC	93.82	182.59	+88.77
Total TAPs	3.057	3.70	+0.13

SECTION 2.0

APPLICATION FOR APPROVAL OF EMISSIONS OF AIR POLLUTANTS FROM PART 70 SOURCES

Department of Environmental Quality Office of Environmental Services Air Permits Division P.O. Box 4313 Baton Rouge, LA 70821-4313 (225) 219-3181	**LOUISIANA** **Application for Approval of Emissions of Air Pollutants from Part 70 Sources**	DEQ LOUISIANA

PLEASE TYPE OR PRINT

1. Facility Information [LAC 33:III.517.D.1]

Facility Name or Pro cess Unit Name (if any) LOOP LLC Port Complex	☒ All Process Units ☐ Process Unit-specific Permit
Agency Interest Number (A.I. Number) 4634	**Currently Effective Permit Number(s)** 1560-00027-03
Company - Name of Owner LOOP LLC	
Company - Name of Operator (if different from Owner)	
Parent Company (if Company – Name of Owner given above is a division)	

Ownership:
Check the appropriate box.

☐ corporation, partnership, or sole proprietorship ☐ regulated utility ☐ municipal government
☐ state government ☐ federal government ☒ other, specify LLC

2. Physical Location and Process Description [LAC 33:III.517.D.18, unless otherwise stated]

What does this facility produce? Add more rows as necessary.
The LOOP Complex consists of the Clovelly Dome Storage Terminal in Galliano, the Small Boat Harbor in Leeville, and the Fourchon Booster Station in Leeville. The LOOP Complex is currently permitted to handle 230 million barrels of crude oil per year through the Clovelly Dome storage tanks.

What modifications/changes are proposed in this application? Add more rows as necessary.
LOOP proposes to expand its Clovelly Dome Storage Terminal to include six (6) additional storage tanks and one new emergency diesel generator. The new tanks will be modeled after the existing tanks, each being an external floating roof tank and having a diameter of 310 feet. Refer to Figure 2 Plot Plan for the location of the new tanks. The capacity of each of the new tanks will be 600,000 barrels.

Nearest town (in the same parish as the facility): Galliano
Parish(es) where facility is located: Lafourche

Distance To (mi):	215 Texas	250 Arkansas	65 Mississippi	125 Alabama
Latitude of Facility Front Gate:	29 Deg	27 Min	11 Sec	____ Hundredths
Longitude of Facility Front Gate:	90 Deg	16 Min	30 Sec	____ Hundredths
Distance from nearest Class I Area	150	kilometers		

Add physical address and description of location of the facility below. If the facility has no address, provide driving directions. Add more rows as necessary.
LOOP LLC Port Complex (LOOP Complex) is located in Lafourche Parish, Louisiana.

☒ Map attached (required per LAC 33:III.517.D.1) **See Figure 1**
☒ Description of processes and products attached (required per LAC 33:III.517.D.2) **See Section 1.0**
☒ Introduction/Description of the proposed project attached (required per LAC 33:III.517.D.5) **See Section 1.0**

3. Confidentiality [LAC 33.I.Chapter 5]

Are you requesting confidentiality for any information except air pollutant emission rates? ☐ Yes ☒ No

If "yes," list the sections for which confidentiality is requested below. Add rows as necessary. Confidentiality requests require a submittal that is separate from this application. Information for which confidentiality is requested should not be submitted with this application. Consult instructions.

4. Type of Application [LAC 33:III.517.D]

Complete the appropriate column (1 or 2) that corresponds to the type of permit being sought. Check all that apply within the appropriate column.

Column 1	Column 2
☐ Part 70 General	☒ Part 70 Regular
☐ Renewal	☐ Renewal
Select one, if applicable: ☐ Entirely new facility ☐ Modification or expansion of existing facility (may also include reconciliations) ☐ Reconciliation only ☐ Individual emissions unit(s) addition	Select one, if applicable: ☐ Entirely new facility ☒ Significant modification or expansion of existing facility (may also include reconciliations) [LAC 33:III.527] ☐ Minor modification or expansion of existing facility (may also include reconciliations) [LAC 33:III.525] ☐ Reconciliation only
	NSR Analysis: PSD ☐ NNSR ☐

Does this submittal update or replace an application currently under review? ☐ Yes ☒ No

If yes, provide date that the prior application was submitted: _____

Select one if this application is for an existing facility that does not have an air quality permit:

☐ Previously Grandfathered (LAC 33:III.501.B.6)
☐ Previously Exempted (e.g., Small Source Exemption; Act 918)
☐ Previously Unpermitted

5. Fee Information [LAC 33:III.517.D.17]

Fee Parameter: If the fee code is based on an operational parameter (such as number of employees or capital cost), enter that parameter here. _____

Industrial Category: Enter the Standard Industrial Classification (SIC) Codes that apply to the facility.

Primary SICC: 4612

Secondary SICC(s): _____

Project Fee Calculation: Enter fee code, permit type, production capacity/throughput, and fee amount pursuant to LAC 33:III.Chapter 2. Add rows to this table as needed. Include with the application the amount in the Grand Total blank as the permit application fee.

FEE CODE	TYPE	EXISTING CAPACITY	INCREMENTAL CAPACITY INCREASE	*SURCHARGES*				
				MULTIPLIER	NSPS	PSD	AIR TOXICS	TOTAL AMOUNT
1364	Major	59.4 MMbbls	3.6 MMbbls	N/A	☒	☐	☐	$6,286.25
					☐	☐	☐	$
					☐	☐	☐	$
					GRAND TOTAL			$6,286.25

***Optional** Fee Explanation:** Use the space provided to give an explanation of the fee determination displayed above.
Major Modification Application Fee ($5,029) + NSPS Surcharge (25%) = $6,286.25

Electronic Fund Transfer (EFT): If paying the permit application fee using an Electronic Fund Transfer (EFT), please include the EFT Transaction Number, the Date that the EFT was made, and the total dollar amount submitted in the EFT. If not paying the permit application fee using EFT, leave blank.

EFT Transaction Number	Date of Submittal	Total Dollar Amount
		$

6. Key Dates

Estimated date construction will commence: May 2011 *Estimated date operation will commence:* Jan 2012

7. Pending Permit Applications – For Process Unit-Specific Permits Only [LAC 33:III.517.D.18]

List all other process units at this facility for which Part 70 permit applications have been submitted, but have not been acted upon by LDEQ as of the date of submittal of this application. If none, state "none" in the table. ****It is not necessary to update this table during the permit review process, unless requested by LDEQ.*****

Process Unit Name	Permit Number	Date Submitted

8. LAC 33:I.1701 Requirements – Answer all below for new sources and permit renewals - ☒ Yes ☐ No

Does the company or owner have federal or state environmental permits identical to, or of a similar nature to, the permit for which you are applying in Louisiana or other states? (This requirement applies to all individuals, partnerships, corporations, or other entities who own a controlling interest of 50% or more in your company, or who participate in the environmental management of the facility for an entity applying for the permit or an ownership interest in the permit.)
☒ **Yes** ☐ **No**

If yes, list States: Louisiana

Do you owe any outstanding fees or final penalties to the Department? ☐ **Yes** ☒ **No**
If yes, explain below. Add rows if necessary.

Is your company a corporation or limited liability company? ☒ **Yes** ☐ **No**
If yes, attach a copy of your company's Certificate of Registration and/or Certificate of Good Standing from the Secretary of State. The appropriate certificate(s) should be attached to the end of this application as an appendix.

See Appendix F.

9. Permit Shield Request [LAC 33:III.517.E.7] - ☐ Yes ☒ No

If yes, check the appropriate boxes to indicate the type of permit shield being sought. Include the specific regulatory citation(s) for which the shield is being requested. Give an explanation of the circumstances that will justify the permit shield request. Attach additional pages if necessary. If additional pages are used, attach them directly behind this page and enter "See Attached Pages" into the Explanation field.

Type of Permit Shield request (check all that apply):

Non-applicability determination for:	Specific Citation(s)	Explanation
☐ 40 CFR 60		
☐ 40 CFR 61		
☐ 40 CFR 63		
☐ Prevention of Significant Deterioration		
☐ Nonattainment New Source Review		

Interpretation of monitoring, recordkeeping, and/or reporting requirements, and/or means of compliance for:	Specific Citation(s)	Explanation
☐ 40 CFR 60		
☐ 40 CFR 61		
☐ 40 CFR 63		
☐ Prevention of Significant Deterioration		
☐ Nonattainment New Source Review		
☐ State Implementation Plan (SIP) Regulation(s) referenced in 40 CFR 52 Subpart T		

10. Certification of Compliance With Applicable Requirements

Statement for Applicable Requirements for Which the Company and Facility Referenced In This Application Is In Compliance

Based on information and belief, formed after reasonable inquiry, the company and facility referenced in this application is in compliance with and will continue to comply with all applicable requirements pertaining to the sources covered by the permit application, as outlined in Tables 1 and 2 in the permit application.

For requirements promulgated as of the date of this certification with compliance dates effective during the permit term, I further certify that the company and facility referenced in this application will comply with such requirements on a timely basis and will continue to comply with such requirements.

CERTIFICATION: I certify, under provisions in Louisiana and United States law which provide criminal penalties for false statements, that based on information and belief formed after reasonable inquiry, the statements and information contained in this Application for Approval of Emissions of Air Pollutants from Part 70 Sources, including all attachments thereto and the compliance statement above, are true, accurate, and complete.

a. Responsible Official		
Name CaSandra J. Cooper-Gates		
Title Senior Vice President Administration		
Company LOOP LLC		
Suite, mail drop, or division		
Street or P.O. Box 137 Northpark Dr.		
City Covington	**State** LA	**Zip** 70433-5071
Business phone (985) 276-6282		
Email Address ccoopergates@loopllc.com		

Signature of responsible official (See 40 CFR 70.2):
Ca Sandra J. Cooper-Gates
Date: December 21, 2010

CERTIFICATION: I certify that the engineering calculations, drawings, and design are true and accurate to the best of my knowledge.

b. Professional Engineer		
Name Tracy Fazio, PE		
Title Project Engineer		
Company C-K Associates, LLC		
Suite, mail drop, or division 17170 Perkins Rd		
Street or P.O. Box		
City Baton Rouge	**State** LA	**Zip** 70810
Business phone 225-755-1000		
Email Address tracy.fazio@c-ka.com		

Signature of Professional Engineer:
Tracy Fazio
Date: 12/23/10
Louisiana Registration No. 33598

STATE OF LOUISIANA
TRACY FAZIO
License No. 33598
PROFESSIONAL ENGINEER IN ENVIRONMENTAL ENGINEERING

11. Personnel [LAC 33:III.517.D.1]

a. Manager of Facility who is located at plant site		
Name Chris Labat	☐Primary contact	
Title General Manager of Operations		
Company LOOP LLC		
Suite, mail drop, or division		
Street or P.O. Box 224 East 101 Place		
City Cut Off	**State** LA	**Zip** 70345
Business phone (985) 696-4836		
Email address calabat@loopllc.com		

b. On-site contact regarding air pollution control		
Name Same as a.	☐Primary contact	
Title		
Company		
Suite, mail drop, or division		
Street or P.O. Box		
City	**State**	**Zip**
Business phone		
Email address		

c. Person to contact with written correspondence		
Name Cynthia A. Gardner-LeBlanc	☒Primary contact	
Title Senior Regulatory Representative		
Company LOOP LLC		
Suite, mail drop, or division		
Street or P.O. Box 137 Northpark Dr.		
City Covington	**State** LA	**Zip** 70433-5071
Business phone (985) 276-6299		
Email address cgleblanc@loopllc.com		

d. Person who prepared this report		
Name Jennifer Tullier	☐Primary contact	
Title Environmental Scientist		
Company C-K Associates, LLC		
Suite, mail drop, or division		
Street or P.O. Box 17170 Perkins Road		
City Baton Rouge	**State** LA	**Zip** 70810
Business phone 225-755-1000		
Email address Jennifer.Tullier@c-ka.com		

e. Person to contact about Annual Maintenance Fees		☐ a ☐ b ☒ c ☐ d ☐ other (specify below)		
Name	☐Primary contact	**Suite, mail drop, or division**		
Title		**Street or P.O. Box**		
Company		**City**	**State**	**Zip**
Business Phone		**Email Address**		

12. Proposed Project Emissions [LAC 33:III.517.D.3]

List the total emissions following the proposed project for this facility or process unit (for process unit-specific permits). Speciate all criteria pollutants, TAP, and HAP for the proposed project.

Pollutant	Proposed Emission Rate (tons/yr)
PM10	2.34
SO2	1.89
CO	10.01
NOx	51.23
Total VOC	182.59
Total TAPS	3.70
Acetaldehyde	0.04
Benzene	1.20
Cumene (Isopropyl benzene)	0.03
Ethylbenzene	0.15
Formaldehyde	0.06
n-Hexane	1.12
Toluene	0.66
Xylenes	0.44

13. History of Permitted Emissions [LAC 33:III.517.D.18]

List each of the following in chronological order:

- The Permit Number and Date Action Issued for each air quality permit that has been issued to this facility or process unit (for process unit-specific permits) within the last ten (10) years.
- All small source exemptions, authorizations to construct, administrative amendments, case-by-case insignificant activities, and changes of tank service that have been approved since the currently effective Title V Operating Permit or State Operating Permit was issued to this facility or process unit (for process unit-specific permits). It is not necessary to list any such activities issued prior to the issuance of the currently effective Title V Operating Permit or State Operating Permit, if one exists.

Permit Number	Date Action Issued
Permit Nos. 903 & 904	2/28/78
1560-00027-01	2/18/00
1560-00027-02	2/5/03
1560-00027-03	6/12/07

14. Facility-wide Permitted Emissions – For Process Unit-Specific Permits Only [LAC 33:III.517.D.3]

List each of the following:

- All currently effective air quality permits for this facility. All process units located at this facility should be represented in this section. This includes any Acid Rain or PSD permits.

For each listed currently effective air quality permit:

- Show each permitting action's grand total for each permitted pollutant. These rates should be those shown in the permitting action as issued by LDEQ and not those shown in the application for the permitting action. For administrative amendments, it is only necessary to state the emission rates that were amended.
- Group the permitted emission rates by permit action. Consult instructions.

As the last entry, show the facility-wide grand total for each pollutant.

Permit Actions	Date Action Issued	Pollutant	Permitted Emission Rate (tons/yr)

15.a. Enforcement Actions [LAC 33:III.517.D.18] - ☐ Yes ☒ No

If yes, list all federal and state air quality enforcement actions, settlement agreements, and consent decrees received for this facility and/or process unit (for process unit-specific permits) since the issuance of the currently effective Title V Operating Permit or State Operating Permit. For each action, list the type of action (or its tracking number), the regulatory authority or authorities that issued the action, and the date that the action was issued. Summarize the conditions imposed by the enforcement action, settlement agreement, and consent decree in Section 23, Table 2. It is not necessary to submit a copy of the referenced action. Add rows to table as necessary.

Type of Action or Tracking Number	Issuing Authority	Date Action Issued	Summary of Conditions Included?
			☐ Yes ☐ No
			☐ Yes ☐ No

15.b. Schedule for Compliance [LAC 33:III.517.E.4] ☐ Yes ☒ No

If the facility or process unit for which application is being made is not in full compliance with all applicable regulations, give a description of how compliance will be achieved, including a schedule for compliance below. Add rows as necessary. See instructions.

16. Letters of Approval for Alternate Methods of Compliance - ☐ Yes ☒ No

If yes, list all correspondence with LDEQ, EPA, or other regulatory bodies that provides for or supports a request for alternate methods of compliance with any applicable regulations for this facility or process unit (for process unit-specific permits). List the date of issuance of the letter and the regulation referenced by the letter. **Attach as an appendix a copy of all documents referenced in this table.** Letters that are not included may not be incorporated into a final permit. Add rows to table as necessary.

Date Letter Issued	Issuing Authority	Referenced Regulation(s)	Copy of Letter Attached?
			☐ Yes ☐ No
			☐ Yes ☐ No
			☐ Yes ☐ No
			☐ Yes ☐ No

17. Initial Notifications and Performance Tests [LAC 33:III.517.E.1] - ☐ Yes ☒ No

If yes, list any initial notifications that have been submitted or one-time performance tests that have been performed for this facility or process unit (for process unit-specific permits) since the issuance of the currently effective Title V Operating Permit or State Operating Permit in order to satisfy regulatory requirements. Any initial notification or one-time performance test requirements that have not been satisfied should be listed in Section 23, Table 2 of this application. Any notifications or performance tests that recur periodically should also be properly noted in Section 23, Table 2 of this application. Add rows to table as necessary.

Initial Notification or One-time Performance Test?	Regulatory Citation Satisfied	Date Completed/Approved

18. Existing Prevention of Significant Deterioration or Nonattainment New Source Review Limitations [LAC 33:III.517.D.18]

Do one or more emissions sources represented in this permit application currently operate under one or more NSR permits?
☐ Yes ☒ No

If "yes," summarize the limitations from such permit(s) in the following table. Add rows to table as necessary. Be sure to note any annual emissions limitations from such permit(s) in Sections 13 and 14 of this application.

Permit Number	Date Issued	Emission Point ID No.	Pollutant	BACT/LAER Limit[1]	Averaging Period	Description of Control Technology/Work Practice Standards

[1]For example, lb/MM Btu, ppmvd @ 15% O_2, lb/ton, lb/hr

19. Air Quality Dispersion Modeling [LAC 33:III.517.D.15]

Was Air Quality Dispersion Modeling as required by LAC 33:III performed in support of this permit application? (Air Quality Dispersion Modeling is only required when applying for PSD permits and as requested by LDEQ.)
☐ Yes ☒ No

*Has Air Quality Dispersion Modeling completed in accordance with LAC 33:III ever been performed for this facility in support of a air permit application previously submitted for this facility or process unit (for process unit-specific permits) or as required by other regulations **AND** approved by LDEQ?*
☐ Yes ☒ No

If yes, enter the date the most recent Air Quality Dispersion Modeling results as required by LAC 33:III were submitted:

_____

If the answer to either question above is "yes," enter a summary of the most recent results in the following table. If the answer to both questions is "no," enter "none" in the table. Add rows to table as necessary.

Pollutant	Time Period	Calculated Maximum Ground Level Concentration	Louisiana Toxic Air Pollutant Ambient Air Standard or (National Ambient Air Quality Standard {NAAQS})

20. General Condition XVII Activities- ☐ Yes ☒ No

Enter all activities that qualify as Louisiana Air Emissions Permit General Condition XVII Activities.

- Expand this table as necessary to include all such activities.
- See instructions to determine what qualifies as a General Condition XVII Activity.
- Do not include emissions from General Condition XVII Activities in the proposed emissions totals for the permit application.

		Emission Rates – TPY					
Work Activity	**Schedule**	**PM_{10}**	**SO_2**	**NO_x**	**CO**	**VOC**	**Other**

21. Insignificant Activities [LAC 33:III.501.B.5] - ☐ Yes ☒ No

Enter all activities that qualify as Insignificant Activities.

- Expand this table as necessary to include all such activities.
- For sources claimed to be insignificant based on size or emission rate (LAC 33:III.501.B.5.A), information must be supplied to verify each claim. This may include but is not limited to operating hours, volumes, and heat input ratings.
- If aggregate emissions from all similar pieces of equipment (i.e. all LAC 33:III.501.B.5.A.1 activities) claimed to be insignificant are greater than 5 tons per year for any pollutant, then the activities can not be claimed as insignificant and must be represented as permitted emission sources. Consult instructions.

Emission Point ID No.	Description	Physical/Operating Data	Citation
2-78	Fuel Tank for Emergency Generators (Clovelly Dome)	8,200 gallons	LAC 33:III.501.B.5.A.3
22-78	Emergency Crude Transfer Pump Fuel Tank (Clovelly Dome)	8,200 gallons	LAC 33:III.501.B.5.A.3
25-88	Tank 3 Operations Center Fuel Tank (Clovelly Dome)	550 gallons	LAC 33:III.501.B.5.A.3
26-88	Tank 4 Operations Center Tank (Clovelly Dome)	4,000 gallons	LAC 33:III.501.B.5.A.3
27-88	Tank 5 Fourchon Booster Station Tank	1,000 gallons	LAC 33:III.501.B.5.A.3
28-88	Tank 6 Fourchon Booster Station Emergency Generator Fuel Tank	322 gallons	LAC 33:III.501.B.5.A.3
29-88	Tank 7 Fourchon Booster Station Dock Fuel Tank	560 gallons	LAC 33:III.501.B.5.A.3
30-88	Tank 8 Clovelly Day Tank for Fire Pump	80 gallons	LAC 33:III.501.B.5.A.2
31-88	Tank 9 Clovelly Day Tank for Generator	116 gallons	LAC 33:III.501.B.5.A.2
32-88	Tank 10 Clovelly Underground Slop Oil Tank by Lab	2,000 gallons	LAC 33:III.501.B.5.A.3
34-88	Tank 12 Small Boat Harbor Tank	260 gallons	LAC 33:III.501.B.5.A.3
36-89	Day Tank for Operations Center Standby Generator (Clovelly Dome)	94 gallons	LAC 33:III.501.B.5.A.2
37-91	Small Boat Harbor Diesel Tank	564 gallons	LAC 33:III.501.B.5.A.3
N/A	Hurricane Season portable generator engines (10)	Emissions from testing < 5 tpy	LAC 33:III.501.B.5.D

22. Regulatory Applicability for Commonly Applicable Regulations – Answer all below [LAC 33:III.517.D.10]

Does this facility contain asbestos or asbestos containing materials? ☐ **Yes** ☒ **No**
If "yes," the facility or any portion thereof may be subject to 40 CFR 61, Subpart M, LAC 33:III.Chapter 27, and/or LAC 33:III.5151 and this application must address compliance as stated in Section 23 of this application

Is the facility or process unit represented in this permit subject to 40 CFR 68, or is any other process unit located at the same facility as the process unit represented in this application subject to 40 CFR 68? ☐ **Yes** ☒ **No**
If "yes," the entire facility is subject to 40 CFR 68 and LAC 33:III.Chapter 59 and this application must address compliance as stated in Section 23 of this application.

Is the facility listed in LAC 33:III.5611

Table 5 ☐ **Yes** ☒ **No**

Table 6 ☐ **Yes** ☒ **No**

Table 7 ☐ **Yes** ☒ **No**

Does the applicant own or operate commercial refrigeration equipment normally containing more than 50 pounds of refrigerant at this facility or process unit? ☐ **Yes** ☒ **No**
If "yes," the entire facility is subject to 40 CFR 82, Subpart F and this application must address compliance as stated in Section 23 of this application.

23. Applicable Regulations, Air Pollution Control Measures, Monitoring, and Recordkeeping

Important points for Table 1 [LAC 33:III.517.D.10]:

- List in Table 1, by Emission Point ID Number and Descriptive Name of the Equipment, state and federal pollution abatement programs and note the applicability or non-applicability of the regulations to each source.
- Adjust the headings for the columns in Table 1 as necessary to reflect all applicable regulations, in addition to any regulations that do not apply but need an applicability determination to verify this fact.
- For each piece of equipment, enter "1" for each regulation that applies. Enter "2" for each regulation that applies to this type of source, but from which this source of emissions is exempt. Enter "3" for equipment that is subject to a regulation, but does not have any applicable requirements. Also, enter "3" for each regulation that have applicable requirements that apply to the particular emission source but the regulations currently do not apply due to meeting a specific criterion, such as it has not been constructed, modified or reconstructed since the regulations have been in place.
- Leave the spaces blank when the regulations clearly would not apply under any circumstances to the source. For example, LAC 33:III.2103 – Storage of Volatile Organic Compounds would never apply to a steam generating boiler, no matter the circumstances.
- Consult instructions.

Important points for Table 2 [LAC 33:III.517.D.4; LAC 33:III.517.D.7; LAC 33:III.517.D.10]:

- For each piece of equipment listed in Table 2, include all applicable limitation, recordkeeping, reporting, monitoring, and testing requirements. Also include any one-time notification or one-time tests performance test requirements that have not been fulfilled.
- Each of these regulatory aspects (limitation, recordkeeping, reporting, etc.) should be addressed for each regulation that is applicable to each emissions source or emissions point.
- For each regulation that provides a choice regarding the method of compliance, indicate the method of compliance that will be employed. It is not sufficient to state that all compliance options will be employed, though multiple compliance options may be approved as alternative operating scenarios.
- Consult instructions.

Important points for Table 3 [LAC 33:III.517.D.16]:

- Each time a 2 or a 3 is used to describe applicability of a source in Table 1, an entry should be made in Table 3 that explains the exemption or non-applicability status of the regulation to that source.
- Fill in all requested information in the table.
- The exact regulatory citation that provides for the specific exemption or non-applicability determination should be entered into the Citation Providing for Exemption or Non-applicability column.
- Consult Instructions.

Important points for Table 4 [LAC 33:III.517.D.18]

- List any single emission source that routes its emissions to another point where these emissions are commingled with the emissions of other sources before being released to the atmosphere. Do not list any single emission source in this table that does not route its emissions in this manner.
- List any and all emission sources that are routed as described above. This includes emission sources that do not otherwise appear in this permit application.
- Consult instructions.

TABLE 1: APPLICABLE LOUISIANA AND FEDERAL AIR QUALITY REQUIREMENTS
LOOP, LLC - Port Complex
Lafourche Parish, Louisiana

Source ID No.:		LAC 33:III														
		5	9	11	13	15	2103	2104	2107	2111	2113	22	29	51	56	59
Facility wide	LOOP LLC Port Complex	1	1		1						1			3	1	3
EQT003	1-78 Crude Relief Tank (Clovelly Dome)						1									
EQT004	5-78 Slop Oil Tank (Small Boat Harbor)						3									
FUG001	10-78 Fugitive Emissions (Clovelly Dome)									1						
EQT006	11-78 Fourchon Booster Station No. 2 Fuel Tank No. 1						3									
EQT007	12-78 Salt Dome Cavities (9) / Piping, and Brine Storage Reservoir (Clovelly Dome)															
EQT008	13-78 Fourchon Booster Station No. 2 Fuel Tank No. 2						3									
EQT009	15-78 Fourchon Booster Station Standby Generator			1	1											
EQT011	17-78 Clovelly Dome - Operations Center Standby Generator			1	1											
EQT012	18-78 Clovelly Dome - Emergency Crude Transfer Pump			1	1											
EQT013	19-78 Clovelly Dome - Portable Diesel Generator			1	1											
EQT014	20-78 Clovelly Fire Pump			1	1											
EQT015	21-78 Clovelly Dome - Standby Generator - Brine Storage Reservoir			1	1											
EQT016	23-88 Clovelly Dome - Tank 1 Operations Center						1									
EQT017	24-88 Clovelly dome - Tank 2 Operations Center						1									
EQT018	35-88 Clovelly Dome - Fire School Pump			1	1											
EQT019	38-91 Clovelly Dome - Operations Center Fire Pump			1	1											
EQT020	5-99 Clovelly Dome - Crude Oil Tank Farm Firewater Pump			1	1											
EQT021	1-07 470 bhp Emergency Generator (Small Boat Harbor)			1	1											
EQT022	2-07 470 bhp Emergency Generator (Tank Facility)			1	1											
EQT023	3-07 671 bhp Emergency Generator (Clovelly Dome)			1	1											
EQT024	4-07 671 bhp Emergency Generator (Clovelly Control Room)			1	1											
EQT025	5-07 268 bhp Emergency Generator (OC Warehouse)			1	1											
EQT026	6-07 168 bhp Emergency Generator (Locap)			1	1											

TABLE 1: APPLICABLE LOUISIANA AND FEDERAL AIR QUALITY REQUIREMENTS
LOOP, LLC - Port Complex
Lafourche Parish, Louisiana

Source ID No.:		LAC 33:III														
		5	9	11	13	15	2103	2104	2107	2111	2113	22	29	51	56	59
GRP003	Clovelly Dome Crude Oil Storage Tank CAP	1														
EQT027	1-99 Tank 6401 (Clovelly Dome)						1									
EQT028	2-99 Tank 6402 (Clovelly Dome)						1									
EQT029	3-99 Tank 6405 (Clovelly Dome)						1									
EQT030	4-99 Tank 6406 (Clovelly Dome)						1									
EQT031	6-02 Tank 6409 (Clovelly Dome)						1									
EQT032	7-02 Tank 6410 (Clovelly Dome)						1									
EQT033	8-07 Tank 6403 (Clovelly Dome)						1									
EQT034	9-07 Tank 6404 (Clovelly Dome)						1									
EQT035	10-07 Tank 6407 (Clovelly Dome)						1									
EQT036	11-07 Tank 6408 (Clovelly Dome)						1									
EQT037	12-07 Tank 6411 (Clovelly Dome)						1									
EQT038	13-07 Tank 6412 (Clovelly Dome)						1									
EQT039	14-07 Tank 6413 (Clovelly Dome)						1									
EQT040	15-07 Tank 6414 (Clovelly Dome)						1									
NEW	16-10 Tank 6415 (Clovelly Dome)						1									
NEW	17-10 Tank 6416 (Clovelly Dome)						1									
NEW	18-10 Tank 6417 (Clovelly Dome)						1									
NEW	19-10 Tank 6418 (Clovelly Dome)						1									
NEW	20-10 Tank 6419 (Clovelly Dome)						1									
NEW	21-10 Tank 6420 (Clovelly Dome)						1									
NEW	1-10 520 HP Emergency Generator			1	1											

TABLE 1: APPLICABLE LOUISIANA AND FEDERAL AIR QUALITY REQUIREMENTS
LOOP, LLC - Port Complex
Lafourche Parish, Louisiana

Source		40 CFR 60					40 CFR 61		40 CFR 63				40 CFR	
ID No.:	Descriptive Name of the Source	A	Ka	Kb	GG	IIII	A	FF	A	VV	ZZZZ	CCCCCC	64	68
Facility wide	LOOP LLC Port Complex	1							1					3
EQT003	1-78 Crude Relief Tank (Clovelly Dome)		1											
EQT004	5-78 Slop Oil Tank (Small Boat Harbor)		3											
FUG001	10-78 Fugitive Emissions (Clovelly Dome)													
EQT006	11-78 Fourchon Booster Station No. 2 Fuel Tank No. 1		3											
EQT007	12-78 Salt Dome Cavities (9) / Piping, and Brine Storage Reservoir (Clovelly Dome)													
EQT008	13-78 Fourchon Booster Station No. 2 Fuel Tank No. 2		3											
EQT009	15-78 Fourchon Booster Station Standby Generator					3					1			
EQT011	17-78 Clovelly Dome - Operations Center Standby Generator					3					1			
EQT012	18-78 Clovelly Dome - Emergency Crude Transfer Pump					3					1			
EQT013	19-78 Clovelly Dome - Portable Diesel Generator					3					1			
EQT014	20-78 Clovelly Fire Pump					3					1			
EQT015	21-78 Clovelly Dome - Standby Generator - Brine Storage Reservoir					3					1			
EQT016	23-88 Clovelly Dome - Tank 1 Operations Center			3								1		
EQT017	24-88 Clovelly dome - Tank 2 Operations Center			3								1		
EQT018	35-88 Clovelly Dome - Fire School Pump					3					1			
EQT019	38-91 Clovelly Dome - Operations Center Fire Pump					3					1			
EQT020	5-99 Clovelly Dome - Crude Oil Tank Farm Firewater Pump					3					1			
EQT021	1-07 470 bhp Emergency Generator (Small Boat Harbor)					3					1			
EQT022	2-07 470 bhp Emergency Generator (Tank Facility)					3					1			
EQT023	3-07 671 bhp Emergency Generator (Clovelly Dome)					3					1			

TABLE 1: APPLICABLE LOUISIANA AND FEDERAL AIR QUALITY REQUIREMENTS
LOOP, LLC - Port Complex
Lafourche Parish, Louisiana

Source ID No.:	Descriptive Name of the Source	40 CFR 60					40 CFR 61		40 CFR 63				40 CFR	
		A	Ka	Kb	GG	IIII	A	FF	A	VV	ZZZZ	CCCCCC	64	68
EQT024	4-07 671 bhp Emergency Generator (Clovelly Control Room)					3					1			
EQT025	5-07 268 bhp Emergency Generator (OC Warehouse)					3					1			
EQT026	6-07 168 bhp Emergency Generator (Locap)					3					1			
GRP003	Clovelly Dome Crude Oil Storage Tank CAP			1										
EQT027	1-99 Tank 6401 (Clovelly Dome)			1										
EQT028	2-99 Tank 6402 (Clovelly Dome)			1										
EQT029	3-99 Tank 6405 (Clovelly Dome)			1										
EQT030	4-99 Tank 6406 (Clovelly Dome)			1										
EQT031	6-02 Tank 6409 (Clovelly Dome)			1										
EQT032	7-02 Tank 6410 (Clovelly Dome)			1										
EQT033	8-07 Tank 6403 (Clovelly Dome)			1										
EQT034	9-07 Tank 6404 (Clovelly Dome)			1										
EQT035	10-07 Tank 6407 (Clovelly Dome)			1										
EQT036	11-07 Tank 6408 (Clovelly Dome)			1										
EQT037	12-07 Tank 6411 (Clovelly Dome)			1										
EQT038	13-07 Tank 6412 (Clovelly Dome)			1										
EQT039	14-07 Tank 6413 (Clovelly Dome)			1										
EQT040	15-07 Tank 6414 (Clovelly Dome)			1										
NEW	16-10 Tank 6415 (Clovelly Dome)			1										
NEW	17-10 Tank 6416 (Clovelly Dome)			1										

TABLE 1: APPLICABLE LOUISIANA AND FEDERAL AIR QUALITY REQUIREMENTS
LOOP, LLC - Port Complex
Lafourche Parish, Louisiana

Source		40 CFR 60					40 CFR 61		40 CFR 63				40 CFR	
ID No.:	Descriptive Name of the Source	A	Ka	Kb	GG	IIII	A	FF	A	VV	ZZZZ	CCCCCC	64	68
NEW	18-10 Tank 6417 (Clovelly Dome)			1										
NEW	19-10 Tank 6418 (Clovelly Dome)			1										
NEW	20-10 Tank 6419 (Clovelly Dome)			1										
NEW	21-10 Tank 6420 (Clovelly Dome)			1										
NEW	1-10 520 HP Emergency Generator					1					1			

KEY:

1 The regulations have applicable requirements, which apply to this particular emission source. The emissions source may have an exemption from the control stated in the regulation. The emission source may not have to be controlled but may have monitoring, recordkeeping, or reporting requirements.

2 The regulations have applicable requirements, which may apply to this particular emissions source, but the source is currently exempt from these requirements due to meeting a specific criteria, such as it has been constructed, modified, or reconstructed since the regulations have been in place. If the specific criteria changes the source will have to comply at a future date.

3 The regulations apply to this general type of emission source (i.e. vents, furnaces, towers, and fugitives) but do not apply to this particular emission source.

TABLE 2: STATE AND FEDERAL REQUIREMENTS
LOOP, LLC - Port Complex
Lafourche Parish, Louisiana

Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/ Frequency	State Only Requirement
EQT003	**Requirements that limit emissions or operations -**				
1-78 Crude Relief Tank (Clovelly Dome)	Chapter 21 - Control of Emission of Organic Compounds	Equip with a submerged fill pipe.	LAC 33:III.2103.B		
		Seal closure devices required in LAC 33:III.2103D shall have no visible holes, tears, or other openings in the seals or seal fabric.	LAC 33:III.2103.D.2.a		
		Seal closure devices required in LAC 33:III.2103D shall be intact and uniformly in place around the circumference of the floating roof and the tank wall.	LAC 33:III.2103.D.2.b		
		Seal gap area <= 1 in^2/ft of tank diameter (6.5 cm2/0.3m), for gaps between the secondary seal and tank wall that exceed 1/8 inch (0.32 cm) in width.	LAC 33:III.2103.D.2.c	All year	
		Seal gap area <= 10 in^2/ft of tank diameter (65 cm2/0.3m), for gaps between the primary seal and tank wall that exceed 1/8 inch (0.32 cm) in width.	LAC 33:III.2103.D.2.d	All year	
		Initiate repairs of seals within seven working days of recognition of defective conditions by ordering appropriate parts, to avoid noncompliance with LAC 33:III.2103. Complete repairs within three months of the ordering of the repair parts.	LAC 33:III.2103.D.2.e		
		Provide all openings in the external floating roof (except for automatic bleeder vents, rim space vent, and leg sleeves) with a projection below the liquid surface. Equip each opening in the roof (except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves) with a cover, seal or lid that is to be maintained in a closed position at all times except when the device is in actual use. Keep automatic bleeder vents closed at all times except when the roof is being floated off the roof leg supports. Set rim vents to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Equip any emergency roof drain with a slotted membrane fabric cover or equivalent cover that covers at least 90% of the opening.	LAC 33:III.2103.D.3		
		Equip with an external floating roof consisting of a pontoon type roof, double deck type roof, or external floating cover which will rest or float on the surface of the liquid contents and is equipped with a primary closure seal to close the space between the roof edge and tank wall and a continuous secondary seal (a rim mounted secondary) extending from the floating roof to the tank wall.	LAC 33:III.2103.D		
		Determine compliance with LAC 33:III.2103.D.2 and 4 using the methods in LAC 33:III.2103.H.	LAC 33:III.2103.H		
		Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e.	LAC 33:III.2103.H.3		

TABLE 2: STATE AND FEDERAL REQUIREMENTS
LOOP, LLC - Port Complex
Lafourche Parish, Louisiana

Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/ Frequency	State Only Requirement
EQT003 1-78 Crude Relief Tank (Clovelly Dome)	40 CFR Part 60 NSPS Subpart Ka - Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	The primary seal is to be either a metallic shoe seal, a liquid-mounted seal, or a vapor-mounted seal.	40 CFR 60.112a(a)(1)(i)		
		Seal gap area <= 10.0 in^2/ft (212 sq cm/meter) of tank diameter for the accumulated area of gaps between the tank wall and the mechanical shoe seal or liquid-mounted primary seal.	40 CFR 60.112a(a)(1)(i)(A)	All year	
		Seal gap width <= 1.5 in (3.81 cm) for the width of any portion of any gap between the tank wall and the mechanical shoe seal or liquid-mounted primary seal.	40 CFR 60.112a(a)(1)(i)(A)	All year	
		One end of the primary seal metallic shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 24 inches (61 centimeters) above the stored liquid surface.	40 CFR 60.112a(a)(1)(i)(C)		
		There are to be no holes, tears, or other openings in the shoe, primary seal fabric, or seal envelope.	40 CFR 60.112a(a)(1)(i)(D)		
		Install the secondary seal above the primary seas so that it completely covers the space between the roof edge and the tank wall except as provided in 40 CFR 60.112a(a)(1)(ii)(B).	40 CFR 60.112a(a)(1)(ii)(A)		
		Seal gap area <= 1.0 in^2/ft (21.2 sq cm/meter) of tank diameter for the accumulated area of gaps between the tank wall and the secondary seas used in combination with a metallic shoe or liquid-mounted primary seal.	40 CFR 60.112a(a)(1)(ii)(B)	All year	
		Seal gap width <= 0.5 in (1.27 cm) for the width of any portion of any gap between the tank wall and the secondary seal used in combination with a metallic shoe or liquid-mounted primary seal.	40 CFR 60.112a(a)(1)(ii)(B)	All year	
		There are to be no holes, tears, or other openings in the secondary seal fabric, or seal fabric.	40 CFR 60.112a(a)(1)(ii)(C)		
		Each opening in the roof except for automatic bleeder vents and rim space vents is to provide a projection below the liquid surface. Equip each opening in the roof except for the automatic bleeder vents, rim space vents and leg sleeve with a cover, seal or lid and maintain in a closed position at all times (i.e., no visible gap) except when the device is in actual use or as described in 40 CFR 60.112a(a)(1)(iv). Close automatic bleeder vents at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports. Set rim vents to open when the roof is being floated off the roof leg supports or at the manufacturers recommended setting.	40 CFR 60.112a(a)(1)(iii)		
		Provide each emergency roof drain with a slotted membrane fabric cover that covers at least 90% of the area of the opening.	40 CFR 60.112a(a)(1)(iv)		

TABLE 2: STATE AND FEDERAL REQUIREMENTS
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Lafourche Parish, Louisiana

Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/ Frequency	State Only Requirement
EQT003 1-78 Crude Relief Tank (Clovelly Dome)	40 CFR 60 NSPS Subpart Ka	Equip with an external floating roof consisting of a pontoon-type or double-deck-type cover that rests on the surface of the liquid contents and is equipped with a closure device between the tank wall and the roof edge. Except as provided in 40 CFR 60.112a(a)(1)(ii)(D), the closure device is to consist of two seals, one (secondary) above the other (primary). The roof is to be floating on the liquid at all times except during initial fill and when the tank is completely emptied and subsequently refilled. The process of emptying and refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible.	40 CFR 60.112a(a)(1)		
	Requirements that specify monitoring -				
	Chapter 21 - Control of Emission of Organic Compounds	Secondary Seal or closure mechanism monitored by visual inspection/determination semiannually.	LAC 33:III.2103.D.2.e	All year	
		Secondary seals: Seal gap area & width monitored by measurement annually at any tank level, provided the roof is off its legs.	LAC 33:III.2103.D.2.e	All year	
		Primary seals: Seal gap area & width monitored by measurement once every five years at any tank level, provided the roof is off its legs.	LAC 33:III.2103.D.2.e	All year	
	40 CFR Part 60 NSPS Subpart Ka - Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	Seal gap area & width monitored by measurement at the regulations specified frequency. Determine the gap areas and maximum gap widths between the primary seal and the tank wall within 60 days of the initial fill with petroleum liquid and at least once every 5 years thereafter using the procedures in 40 CFR 60.113a(a)(1)(ii). Accomplish all primary seal inspections or gap measurements which require the removal or dislodging of the secondary seal as rapidly as possible and replace the secondary seal as soon as possible.	40 CFR 60.113a(a)(1)(i)(A)	All year	
		Seal gap area & width monitored by measurement at the regulations specified frequency. Determine the gap areas and maximum gap widths between the secondary seal and the tank wall within 60 days of the initial fill with petroleum liquid and at least once every year thereafter using the procedures in 40 CFR 60.113a(a)(1)(ii).	40 CFR 60.113a(a)(1)(i)(B)	All year	
	Requirements that specify records to be kept and record retention time -				
	Chapter 21 - Control of Emission of Organic Compounds	Equipment/operational data recordkeeping by electronic or hard copy upon occurrence of event. Keep records of conditions that are not up to the standards described in LAC 33:III.2103.D.2 and the date(s) that the standards are not met. Notify the administrative authority within seven days of noncompliance with LAC 33:III.2103.D.2	LAC 33:III.2103.D.2.e		
		Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1-7, as applicable.	LAC 33:III.2103.I		

TABLE 2: STATE AND FEDERAL REQUIREMENTS
LOOP, LLC - Port Complex
Lafourche Parish, Louisiana

Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/ Frequency	State Only Requirement
EQT003 1-78 Crude Relief Tank (Clovelly Dome)	40 CFR Part 60 NSPS Subpart Ka - Standards of Performance Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	Gap measurement(s) recordkeeping by electronic or hard copy upon each occurrence of gap measurement performance. Each record shall identify the vessels on which the measurement was performed and shall contain the date of the seal gap measurement, the raw data obtained in the measurement process required by 40 CFR 60.113a.(a)(1)(ii) and the calculation required by 40 CFR 60.113a(a)(1)(iii). Keep records of each gap measurement at the plant for a period of at least two years following the date of measurement.	40 CFR 60.113a(a)(1)(i)(D)		
		Petroleum liquid storage data recordkeeping by electronic or hard copy continuously. Maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period, except as provided in 40 CFR 60.115.a(d).	40 CFR 60.115a		
	Requirements that specify reports to be submitted -				
	40 CFR Part 60 NSPS Subpart Ka - Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	Submit report: Due to DEQ within 60 days of the date of seal gap measurements, if either the seal gap calculated in accord with 40 CFR 60.113a(a)(1)(iii) or the measured maximum seal gap exceeds the limitations specified in 40 CFR 60.112a. The report shall identify the vessel and list each reason why the vessel did not meet the specifications of 40 CFR 60.112a. The report shall also describe the actions necessary to bring the storage vessel into compliance with the specifications of 40 CFR 60.112a.	40 CFR 60.113a(a)(1)(i)(E)		
		Submit notification: Due to DEQ at least 30 days prior to the gap measurement to afford DEQ to have an observer present.	40 CFR 60.113a(a)(1)(iv)		
	Requirements that specify performance testing -				
		None			
EQT009 - EQT015 & EQT018 - EQT026 Internal Combustion Engines	**Requirements that limit emissions or operations -**				
	Chapter 11 - Control of Emissions of Smoke	Opacity <= 20%, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20% for not more than one six-minute period in any 60 consecutive minutes.	LAC 33:III.1101.B		
	Chapter 13 - Emission Standards for Particulate Matter	Opacity <= 20%; except emissions may have an average opacity in excess of 20% for not more than one six-minute period in any 60 consecutive minutes.	LAC 33:III.1311.C	All year	
	40 CFR Part 63 Subpart ZZZZ	Operate the engine according to the conditions described in 40 CFR 63.6640(f)(1)-(4)	40 CFR 63.6640(f)		

TABLE 2: STATE AND FEDERAL REQUIREMENTS
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Lafourche Parish, Louisiana

Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/ Frequency	State Only Requirement
EQT009 - EQT015 & EQT018 - EQT026 Internal Combustion Engines	**Requirements that specify monitoring -**				
	40 CFR Part 63 Subpart ZZZZ	Monitor how may hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.	40 CFR 63.6655(f)(2)		
	Requirements that specify records to be kept and record retention time -				
	40 CFR Part 63 Subpart ZZZZ	Keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan.	40 CFR 63.6655(e)		
		Keep records of the hours of operation of the engine that is recorded through the nonresettable hour meter. Document how may hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.	40 CFR 63.6655(f)(2)		
	40 CFR Part 63 Subpart ZZZZ	Keep records in a form suitable and readily available for expeditions review according to 40 CFR 63.10(b)(1)	40 CFR 63.6660		
		Keep records for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record, as specified in 40 CFR 63.10(b)(1)	40 CFR 63.6660		
	Requirements that specify reports to be submitted -				
		None			
	Requirements that specify performance testing -				
		None			
EQT016 & EQT017 23-88 & 24-88 Gasoline Tanks (Clovelly Dome)	**Requirements that limit emissions or operations -**				
	Chapter 21 - Control of	Equip with a submerged fill pipe.	LAC 33:III.2103.B		
	40 CFR 63 Subpart CCCCCC NESHAPs for Gasoline Dispensing Facilities	You must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following: (1) minimize gasoline spills; (2) clean up spills as expeditiously as practicable; (3) cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use; and (4) minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators. Compliance date for existing units is January 10, 2011.	40 CFR 63.11116(a)		

TABLE 2: STATE AND FEDERAL REQUIREMENTS
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Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/ Frequency	State Only Requirement
EQT016 & EQT017 23-88 & 24-88 Gasoline Tanks (Clovelly Dome)	**Requirements that specify monitoring -**				
	Chapter 21 - Control of Emission of Organic Compounds	Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e.	LAC 33:III.2103.H.3		
	Requirements that specify records to be kept and record retention time -				
	Chapter 21 - Control of Emission of Organic Compounds	Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1-7, as applicable.	LAC 33:III.2103.I		
	40 CFR 63 Subpart CCCCCC NESHAPs for Gasoline Dispensing Facilities	Make available within 24 hours of a request by the Administrator record of gasoline throughput.	40 CFR 63.11116(b)		
	Requirements that specify reports to be submitted -				
		None			
	Requirements that specify performance testing -				
		None			
EQT027 - EQT040 and six (6) new tanks Crude Oil Storage Tanks (Clovelly Dome)	**Requirements that limit emissions or operations -**				
	Chapter 21 - Control of Emission of Organic Compounds	Equip with a submerged fill pipe.	LAC 33:III.2103.B		
		Seal closure devices required in LAC 33:III.2103D shall have no visible holes, tears, or other openings in the seals or seal fabric.	LAC 33:III.2103.D.2.a		
	Chapter 21 - Control of Emission of Organic Compounds	Seal closure devices required in LAC 33:III.2103D shall be intact and uniformly in place around the circumference of the floating roof and the tank wall.	LAC 33:III.2103.D.2.b		
		Seal gap area <= 1 in^2/ft of tank diameter (6.5 cm2/0.3m), for gaps between the secondary seal and tank wall that exceed 1/8 inch (0.32 cm) in width.	LAC 33:III.2103.D.2.c	All year	
		Seal gap area <= 10 in^2/ft of tank diameter (65 cm2/0.3m), for gaps between the primary seal and tank wall that exceed 1/8 inch (0.32 cm) in width.	LAC 33:III.2103.D.2.d	All year	
		Initiate repairs of seals within seven working days of recognition of defective conditions by ordering appropriate parts, to avoid noncompliance with LAC 33:III.2103. Complete repairs within three months of the ordering of the repair parts.	LAC 33:III.2103.D.2.e		

TABLE 2: STATE AND FEDERAL REQUIREMENTS
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Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/ Frequency	State Only Requirement
EQT027 - EQT040 and six (6) new tanks Crude Oil Storage Tanks (Clovelly Dome)	Chapter 21 - Control of Emission of Organic Compounds	Provide all openings in the external floating roof (except for automatic bleeder vents, rim space vent, and leg sleeves) with a projection below the liquid surface. Equip each opening in the roof (except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves) with a cover, seal or lid that is to be maintained in a closed position at all times except when the device is in actual use. Keep automatic bleeder vents closed at all times except when the roof is being floated off the roof leg supports. Set rim vents to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Equip any emergency roof drain with a slotted membrane fabric cover or equivalent cover that covers at least 90% of the opening.	LAC 33:III.2103.D.3		
		Equip with an external floating roof consisting of a pontoon type roof, double deck type roof, or external floating cover which will rest or float on the surface of the liquid contents and is equipped with a primary closure seal to close the space between the roof edge and tank wall and a continuous secondary seal (a rim mounted secondary) extending from the floating roof to the tank wall.	LAC 33:III.2103.D		
		Determine compliance with LAC 33:III.2103.D.2 and 4 using the methods in LAC 33:III.2103.H.	LAC 33:III.2103.H		
		Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e.	LAC 33:III.2103.H.3		
	40 CFR Part 60 NSPS Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	Except for automatic bleeder vents and rim space vents, each opening in a non contact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, equip each opening in the roof with a gasketed cover, seal, or lid and maintain in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Close automatic bleeder vents at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. Set rim vents to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Equip automatic bleeder vents and rim space vents with gaskets. Provide each emergency roof drain with a slotted membrane fabric cover that covers at least 90% of the area of the opening.	40 CFR 60.112b(a)(2)(ii)		

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Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/ Frequency	State Only Requirement
EQT027 - EQT040 and six (6) new tanks Crude Oil Storage Tanks (Clovelly Dome)	40 CFR Part 60 NSPS Subpart Kb	Equip with an external floating roof consisting of a pontoon-type or double-deck type cover that rests on the liquid surface in a vessel with no fixed roof. Equip with a closure device between the wall of the storage vessel and the roof edge. The closure device consists of two seals, secondary above the primary. The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in 40 CFR 60.113b(b)(4), the primary seal shall completely cover the annular space between the edge of the floating roof and tank wall. The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in 40 CFR 60.113b(b)(4). The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except as during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible.	40 CFR 60.112b(a)(2)		
		Add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in 40 CFR 60.113b(b)(4).	40 CFR 60.113b(b)(3)		
		Seal gap area <= 212 cm^2/m of tank diameter (accumulated area) for gaps between the tank wall and the mechanical shoe seal or liquid-mounted primary seal.	40 CFR 60.113b(b)(4)(i)	All year	
		Seal gap width <= 3.81 cm for the width of any portion of any gap between the tank wall and the mechanical shoe seal or liquid-mounted primary seal.	40 CFR 60.113b(b)(4)(i)	All year	
		One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61 centimeters above the stored liquid surface.	40 CFR 60.113b(b)(4)(i)(A)		
		There are to be no holes, tears, or other openings in the shoe, primary seal fabric, or seal envelope.	40 CFR 60.113b(b)(4)(i)(B)		
		Install the secondary seal above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in 40 CFR 60.113b(b)(2)(iii).	40 CFR 60.113b(b)(4)(ii)(A)		
		Seal gap area <= 21.2 cm^2/m of tank diameter (accumulated area) for gaps between the tank wall and the secondary seal.	40 CFR 60.113b(b)(4)(ii)(B)	All year	
		Seal gap width <= 1.27 cm for the width of any portion of any gap between the tank wall and the secondary seal.	40 CFR 60.113b(b)(4)(ii)(B)	All year	

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Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/ Frequency	State Only Requirement
EQT027 - EQT040 and six (6) new tanks Crude Oil Storage Tanks (Clovelly Dome)	40 CFR Part 60 NSPS Subpart Kb	There are to be no holes, tears, or other openings in the secondary seal fabric, or seal fabric.	40 CFR 60.113b(b)(4)(ii)(C)		
		Make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in 40 CFR 60.113b(b)(4)(i) and (ii) except as specified in 40 CFR 60.113b(b)(4)(iii).	40 CFR 60.113b(b)(4)		
		If the external floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with VOL.	40 CFR 60.113b(b)(6)(i)		
	Requirements that specify monitoring -				
	Chapter 21 - Control of Emission of Organic Compounds	Secondary Seal or closure mechanism monitored by visual inspection/determination semiannually.	LAC 33:III.2103.D.2.e	All year	
		Secondary seals: Seal gap area & width monitored by measurement annually at any tank level, provided the roof is off its legs.	LAC 33:III.2103.D.2.e	All year	
		Primary seals: Seal gap area & width monitored by measurement once every five years at any tank level, provided the roof is off its legs.	LAC 33:III.2103.D.2.e	All year	
	40 CFR Part 60 NSPS Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	Seal gap area & width monitored by measurement at the regulations specified frequency. Using the procedures in 40 CFR 60.113b(b)(2) determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel during hydrostatic testing of the vessel or within 60 days of the initial fill with VOL and at least once every 5 years thereafter.	40 CFR 60.113b(b)(1)(i)	All year	
		Seal gap area & width monitored by measurement at the regulations specified frequency. Using the procedures in 40 CFR 60.113b(b)(2) determine the gap areas and maximum gap widths between the secondary seal and the wall of the storage vessel within 60 days of the initial fill with VOL and at least once year thereafter.	40 CFR 60.113b(b)(1)(ii)	All year	
		Tank roof and seals monitored by visual inspection/determination at the regulation's specified frequency. Inspect the external floating roof, the primary seal, the secondary seal, and fittings each time the storage vessel is emptied and degassed.	40 CFR 60.113b(b)(6)	All year	
	Requirements that specify records to be kept and record retention time -				
	Chapter 21 - Control of Emission of Organic Compounds	Equipment/operational data recordkeeping by electronic or hard copy upon occurrence of event. Keep records of conditions that are not up to the standards described in LAC 33:III.2103.D.2 and the date(s) that the standards are not met. Notify the administrative authority within seven days of noncompliance with LAC 33:III.2103.D.2	LAC 33:III.2103.D.2.e		

TABLE 2: STATE AND FEDERAL REQUIREMENTS
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Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/ Frequency	State Only Requirement
EQT027 - EQT040 and six (6) new tanks Crude Oil Storage Tanks (Clovelly Dome)	Chapter 21 - Control of Emission of Organic Compounds	Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1-7, as applicable.	LAC 33:III.2103.I		
	40 CFR Part 60 NSPS Subpart Kb - Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	Gap measurement(s) recordkeeping by electronic or hard copy upon each occurrence of gap measurement performance, as required by 40 CFR 60.113b(b). Each record shall identify the storage vessel in which the measurement was performed and shall contain the date of the measurement, the raw data obtained in the measurement, the calculation described in 40 CFR 60.113b(b)(2)and (b)(3). Keep copies of all records at least two years.	40 CFR 60.115b(b)(4)		
		Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. Keep copies of all records for the life of the source as specified by 40 CFR 60.116b(a).	40 CFR 60.116b(b)		
		VOL storage data recordkeeping by electronic or hard copy continuously. Records consist of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period. Keep copies of all records for at least two years.	40 CFR 60.116b(c)		
	Requirements that specify reports to be submitted -				
	40 CFR Part 60 NSPS Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	Submit notification: Due at least 30 days in advance of any gap measurements required by 40 CFR 60.113b(b)(1)to afford DEQ the opportunity to have an observer present.	40 CFR 60.113b(b)(5)		
		Submit notification in writing: Due at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by 40 CFR 60.113b(6) to afford DEQ an opportunity to inspect the storage vessel prior to refilling. If the inspection required by paragraph 40 CFR 60.113b(b)(6) is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, notify DEQ at least 7 days prior to the refilling of the storage vessel. Notify by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, submit notification in writing including the written documentation and send by express mail so that it is received by DEQ at least 7 days prior to the refilling.	40 CFR 60.113b(b)(6)(ii)		
		Submit a report to DEQ as an attachment to the notification required by 40 CFR 60.7(a)(3). This report shall describe the control equipment and certify that the control equipment meets the specifications of 40 CFR 60.112b(a)(2) and 60.113b(b)(2), (b)(3), and (b)(4). Keep copies of all reports for at least two years.	40 CFR 60.115b(b)(1)		

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LOOP, LLC - Port Complex
Lafourche Parish, Louisiana

Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/ Frequency	State Only Requirement
EQT027 - EQT040 and six (6) new tanks Crude Oil Storage Tanks (Clovelly Dome)	40 CFR Part 60 NSPS Subpart Kb	Submit a report to DEQ within 60 days of performing the seal gap measurements required by 40 CFR 60.113b(b)(1). The report shall contain the date of measurement, the raw data obtained in the measurement, the calculations described in 40 CFR 60.113b(b)(2) and (b)(3). Keep copies of all reports for at least two years.	40 CFR 60.115b(b)(2)		
		Submit a report to DEQ within 30 days after each seal gap measurement detects gaps exceeding the limitations specified in 40 CFR 60.113b(b)(4). The report will identify the vessel and contain the information specified in 40 CFR 60.115b(b)(2) and the date the vessel was emptied or the repairs made and date of repair. Keep copies of all reports for at least two years.	40 CFR 60.115b(b)(4)		
	Requirements that specify performance testing -				
	40 CFR Part 60 NSPS Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	Using the procedures in 40 CFR 60.113b(b)(2) determine the gap areas and maximum gap widths between the secondary seal and the wall of the storage vessel within 60 days of the initial fill with VOL and at least once year thereafter.	40 CFR 60.113b(b)(1)(ii)	All year	
FUG001 10-78 Fugitive Emissions (Clovelly Dome)	**Requirements that limit emissions or operations -**				
	Chapter 21 - Control of Emission of Organic Compounds	Equip all rotary pumps and compressors handling volatile organic compounds having a true vapor pressure of 1.5 psia or greater at handling conditions with mechanical seals or other equivalent equipment.	LAC 33:III.2111		
	Requirements that specify monitoring -				
		None			
	Requirements that specify records to be kept and record retention time -				
		None			
	Requirements that specify reports to be submitted -				
		None			
	Requirements that specify performance testing -				
		None			
1-10 520 HP Emergency Generator	**Requirements that limit emissions or operations -**				
	Chapter 11 - Control of Emissions of Smoke	Opacity <= 20%, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20% for not more than one six-minute period in any 60 consecutive minutes.	LAC 33:III.1101.B		

TABLE 2: STATE AND FEDERAL REQUIREMENTS
LOOP, LLC - Port Complex
Lafourche Parish, Louisiana

Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/ Frequency	State Only Requirement
1-10 520 HP Emergency Generator	Chapter 13 - Emission Standards for Particulate Matter	Opacity <= 20%; except emissions may have an average opacity in excess of 20% for not more than one six-minute period in any 60 consecutive minutes.	LAC 33:III.1311.C	All year	
	NSPS Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	For the purpose of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator. The provisions of this subpart are applicable to manufactures, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) that commence construction after July 11, 2005 where the stationary CI ICE are manufactured after April 1, 2006 and are not fire pump engines.	40 CFR 60.4200(a)(2)(i)		
		Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in 60.4202 for all pollutants, for the same model year and maximum engine power for their 2007 model year and later stationary CI ICE.	40 CFR 60.4205(b)		
		Operate and maintain CI ICE in accordance with approved manufacturer specifications that comply with the applicable emission standards over the lifetime of the engine.	40 CFR 60.4206		
		Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirement of 40 CFR 80.510(b) for nonroad diesel fuel.	40 CFR 60.4207(b)		
		After December 31, 2008, owners and operators may not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year engines.	40 CFR 60.4208(a)		
		Engine must be equipped with a non-resettable hour meter prior to startup of the engine.	40 CFR 60.4209(a)		
		Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. You may only change those settings that are permitted by the manufacturer. You must meet the requirements of 40 CFR parts 89, 94, and/or 1068, as they apply to you.	40 CFR 60.4211(a)		

TABLE 2: STATE AND FEDERAL REQUIREMENTS
LOOP, LLC - Port Complex
Lafourche Parish, Louisiana

Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/ Frequency	State Only Requirement
1-10 520 HP Emergency Generator	40 CFR 60 NSPS Subpart IIII	If you are an owner or operator of a 2007 model year and later CI internal combustion engine and must comply with the emission standards specified in 60.4205(b), you must comply by purchasing an engine certified to the emission standards in 60.4205(b), as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.	40 CFR 60.4211(c)		
		Emergency stationary ICE may be operated for the purposes of maintenance checks and readiness testing (limited to 100 hours/yr), provided the tests are recommended by Federal, State, or Local government, the manufacturer, the vendor, or the insurance company associated with the engine. LOOP may petition for more than 100 hrs/yr limit. Any operation of this engine other than emergency operation and maintenance and testing as permitted in this section is prohibited.	40 CFR 60.4211(e)		
	40 CFR 63 Subpart ZZZZ RICE MACT	Comply with 40 CFR 63 Subpart ZZZZ by complying with 40 CFR 60 IIII.	40 CFR 63.6590(c)		
	Part 80 - Regulation of Fuels and Fuel Additives	As referenced in 40 CFR 60.4207(b), diesel fuel is subject to the following per-gallon standards: sulfur content of 15 ppm maximum for NR diesel fuel or 500 ppm for LM diesel fuel and a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.	40 CFR 80.510(b)		
	Requirements that specify monitoring -				
		None			
	Requirements that specify records to be kept and record retention time -				
		None			
	Requirements that specify reports to be submitted -				
	NSPS Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	Emergency CI ICE are not required to submit an initial notification of applicability to this subpart.	40 CFR 60.4214(b)		
	Requirements that specify performance testing -				
		None			

TABLE 2: STATE AND FEDERAL REQUIREMENTS
LOOP, LLC - Port Complex
Lafourche Parish, Louisiana

Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/ Frequency	State Only Requirement
GRP003 Tank Cap	**Requirements that limit emissions or operations -**				
	Chapter 5 - Permit Procedures	**VOC emissions <= 175.28 tpy. Noncompliance with this limitation is a reportable violation of the permit. Notify the Office of Environmental Compliance, Enforcement Division if the total emissions from crude oil storage tanks exceeds the maximum listed in this specific condition for any twelve consecutive month period.**	LAC 33:III.501.C.6		
	Requirements that specify monitoring -				
		None			
	Requirements that specify records to be kept and record retention time -				
	Chapter 5 - Permit Procedures	**Emissions recordkeeping by electronic or hard copy monthly. Keep records of total emissions from crude oil storage tanks each month, as well as emissions for the last twelve months. Make records available for inspection by DEQ personnel.**	LAC 33:III.501.C.6		
	Requirements that specify reports to be submitted -				
	Chapter 5 - Permit Procedures	**Submit report annually by the 31st of March. Report the total emissions from crude oil storage tanks for the preceding calendar year to the Office of Environmental Compliance, Enforcement Division.**	LAC 33:III.501.C.6		
	Requirements that specify performance testing -				
		None			
GRP004 Entire Facility	**Requirements that limit emissions or operations -**				
	Chapter 13 - Emission Standards for Particulate Matter	Emissions of particulate matter which pass onto or across a public road and create a traffic hazard by impairment of visibility or intensify an existing traffic hazard condition are prohibited.	LAC 33:III.1303.B		
	Chapter 21 - Control of Emission of Organic Compounds	Maintain best practical housekeeping and maintenance practices at the highest possible standards to reduce the quantity of organic compounds emissions. Good housekeeping shall include, but not be limited to , the practices listed in LAC 33:III.2113.A.1-5.	LAC 33:III.2113.A		
	Chapter 2 - Rules and Regulations for the Fee System of the Air Quality Control Program	Failure to pay the prescribed application fee or annual fee as provided herein, within 90 days after the due date, will constitute a violation of these regulations and shall subject the person to applicable enforcement actions under the Louisiana Environmental Quality Act including, but not limited to, revocation or suspension of the applicable permit, license, registration, or variance.	LAC 33:III.219		
	Chapter 56 - Prevention of Air Pollution Emergency Episodes	During an Air Pollution Alert, Air Pollution Warning or Air Pollution Emergency, make the standby plan available on the premises to any person authorized by the department to enforce these regulations.	LAC 33:III.5611.B		

TABLE 2: STATE AND FEDERAL REQUIREMENTS
LOOP, LLC - Port Complex
Lafourche Parish, Louisiana

Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/ Frequency	State Only Requirement
GRP004 Entire Facility	40 CFR Part 60 Subpart A - General Provisions	All affected facilities shall comply with all applicable provisions in 40 CFR 60 Subpart A	40 CFR 60		
	40 CFR Part 63 Subpart A - General Provisions	All affected facilities shall comply with all applicable provisions in 40 CFR 63 Subpart A	40 CFR 63		
	Requirements that specify monitoring -				
		None			
	Requirements that specify records to be kept and record retention time -				
		None			
	Requirements that specify reports to be submitted -				
	Chapter 9 - General Regulations of Control of Emissions and Emission Standards	Submit Emission Inventory (EI)/Annual Emissions Statement: Due annually, by the 31st of March for the period January 1 to December 31 of the previous year unless otherwise directed. Submit emission inventory data in the format specified by the Office of Environmental Assessment. Include all data applicable to the emissions source(s), as specified in LAC 33:III.919.A-D.	LAC 33:III.919.D		
	Chapter 56 - Prevention of Air Pollution Emergency Episodes	Submit standby plan for the reduction or elimination of emissions during an Air Pollution Alert, Air Pollution Warning, or Air Pollution Emergency: Due within 30 days after requested by the administrative authority.	LAC 33:III.5611.A		
GRP004 Entire Facility	**Requirements that specify performance testing -**				
	40 CFR 70 Title V Permitting Program	Submit Title V permit application for renewal 180 calendar days before permit expiration date.	40 CFR 70.5(a)(1)(iii)		
		Submit Title V monitoring results report semiannually, by March 31st and September 30th for the preceding periods encompassing July through December and January through June, respectively. Submit reports to the Office of Environmental Compliance, Surveillance Division. Certify reports by a responsible company official. Clearly identify all instances of deviations from permitted monitoring requirements. For previously reported deviations, in lieu of attaching the individual deviation reports, clearly reference the communication(s)/correspondence(s) constituting the prior report, including the date the prior report was submitted.	40 CFR 70.6(a)(1)(iii)(A)		

TABLE 2: STATE AND FEDERAL REQUIREMENTS
LOOP, LLC - Port Complex
Lafourche Parish, Louisiana

Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/ Frequency	State Only Requirement
GRP004 Entire Facility	40 CFR 70 Title V Permitting Program	Submit Title V excess emissions report semi-annually, by September 30, and March 31. Submit reports of all permit deviations to the Office of Environmental Compliance, Surveillance Division. Certify all reports by a responsible official in accordance with 40 CFR 70.5(d). The reports may be consolidated with the semi-annual reports required by 40 CFR 70.6(a)(3)(iii)(A) as long as the report clearly indicates this and all required information is included and clearly delineated in the consolidated report.	40 CFR 70.6(a)(1)(iii)(B)		
		Submit Title V compliance certification annually, by March 31st to the Office of Environmental Compliance, Surveillance Division.	40 CFR 70.6.(c)(5)(iv)		

TABLE 3: EXPLANATION FOR EXEMPTION STATUS OR NON-APPLICABILITY OF A SOURCE
LOOP, LLC - Port Complex
Lafourche Parish, Louisiana

Emission Point ID No.:	Requirement	Exempt or Does Not Apply	Explanation	Citation Providing for Exemption or Non-applicability
EQT004 5-78 Slop Oil Tank (Small Boat Harbor)	Storage of Volatile Organic Compounds LAC 33:III.2103.B	Does Not Apply	Tank 5-78 has a capacity > 40,000 and stores wastewater and lube oils with tvp < 1.5 psia.	LAC 33:III.2103.B
	Subpart Ka—Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	Does Not Apply	Tank 5-78 contains primarily wastewater and lube oils associated with cleaning equipment and, therefore, does not meet the definition of Petroleum Liquid.	40 CFR Part 60.111a
EQT006 and EQT008 11-78 & 13-78 Fourchon Booster Station No. 2 Tank No. 1 & No. 2	Storage of Volatile Organic Compounds LAC 33:III.2103.B	Does Not Apply	Tanks 11-78 and 13-78 have capacities > 40,000 and store diesel with tvp < 1.5 psia.	LAC 33:III.2103.B
	Subpart Ka—Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	Does Not Apply	Tanks 11-78 and 13-78 have capacities > 40,000 and store diesel, which does not meet the definition of "petroleum liquids" as provided in 60.111a and, therefore, is not applicable.	40 CFR Part 60.111a
EQT009, EQT011, EQT013, EQT015, EQT021 - EQT026 Emergency Generator Engines	NSPS for CI-ICE - 40 CFR 60 Subpart IIII	Does Not Apply	Engines were manufactured prior to applicability date of April 1, 2006. Additionally, the engines have not been modified or reconstructed after July 11, 2005.	40 CFR 60.4200(a)
EQT010, EQT012, EQT014, EQT018, EQT019, and EQT020 Fire Pump Engines	NSPS for CI-ICE - 40 CFR 60 Subpart IIII	Does Not Apply	Engines were manufactured prior to applicability date of July 1, 2006 (NFPA, firewater pumps). Additionally, the engines have not been modified or reconstructed after July 11, 2005.	40 CFR 60.4200(a)
EQT016 and EQT017 23-88 & 24-88 Gasoline Tanks	Subpart Kb-Volatile Organic Liquid Storage Vessels (Including Petroleum Liquids) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	Does Not Apply	Tanks 23-88 and 24-88 each have a capacity of 1,000 gallons and, therefore, are not subject to Subpart Kb.	40 CFR 60.110b
LOOP LLC Port Complex	Comprehensive Toxic Air Pollutant Emission Control Program LAC 33:III.Chapter 51	Does Not Apply	The LOOP Complex is not a major source of toxic air pollutants.	LAC 33:III.5101.A
	Chemical Accident Prevention - LAC 33:III.Chapter 59	Does Not Apply	Applicant does not have on site any of the listed toxic materials in amounts greater than the threshold quantities of this program.	LAC 33:III.Chapter 59
	Chemical Accident Prevention Provisions 40 CFR 68	Does Not Apply	Applicant does not have on site any of the listed toxic materials in amounts greater than the threshold quantities of this program.	40 CFR 68

TABLE 4: EQUIPMENT LIST
LOOP, LLC - Port Complex
Lafourche Parish, Louisiana

Enter each single emission point that routes its emissions to another source (i.e., a control device) or a common stack, or is part of an Emissions Cap. List the emissions source to which each single emission point is routed or the Cap of which the source is a member, if applicable. Consult instructions.

Emission Point ID No:	Description	Construction Date	Routes to:	Operating Rate/Volume	Applicable Requirement(s)?
	9 Salt Dome Cavities, Associated Piping, Pumps, and Brine Storage Reservoir		Clovelly Dome 9 Salt Dome Cavities (12-78)	600 MM bbl/yr	☐ Yes ☑ No
EQT027	1-99 Tank 6401 (Clovelly Dome)	January 2000	Tank CAP (GRP003)	600,000 bbl	☑ Yes ☐ No
EQT028	2-99 Tank 6402 (Clovelly Dome)	January 2000	Tank CAP (GRP003)	600,000 bbl	☑ Yes ☐ No
EQT029	3-99 Tank 6405 (Clovelly Dome)	January 2000	Tank CAP (GRP003)	600,000 bbl	☑ Yes ☐ No
EQT030	4-99 Tank 6406 (Clovelly Dome)	January 2000	Tank CAP (GRP003)	600,000 bbl	☑ Yes ☐ No
EQT031	6-02 Tank 6409 (Clovelly Dome)	March 2000	Tank CAP (GRP003)	600,000 bbl	☑ Yes ☐ No
EQT032	7-02 Tank 6410 (Clovelly Dome)	March 2000	Tank CAP (GRP003)	600,000 bbl	☑ Yes ☐ No
EQT033	8-07 Tank 6403 (Clovelly Dome)		Tank CAP (GRP003)	600,000 bbl	☑ Yes ☐ No
EQT034	9-07 Tank 6404 (Clovelly Dome)		Tank CAP (GRP003)	600,000 bbl	☑ Yes ☐ No
EQT035	10-07 Tank 6407 (Clovelly Dome)		Tank CAP (GRP003)	600,000 bbl	☑ Yes ☐ No
EQT036	11-07 Tank 6408 (Clovelly Dome)		Tank CAP (GRP003)	600,000 bbl	☑ Yes ☐ No
EQT037	12-07 Tank 6411 (Clovelly Dome)		Tank CAP (GRP003)	600,000 bbl	☑ Yes ☐ No
EQT038	13-07 Tank 6412 (Clovelly Dome)		Tank CAP (GRP003)	600,000 bbl	☑ Yes ☐ No
EQT039	14-07 Tank 6413 (Clovelly Dome)		Tank CAP (GRP003)	600,000 bbl	☑ Yes ☐ No
EQT040	15-07 Tank 6414 (Clovelly Dome)		Tank CAP (GRP003)	600,000 bbl	☑ Yes ☐ No
NEW	16-10 Tank 6415 (Clovelly Dome)		Tank CAP (GRP003)	600,000 bbl	☑ Yes ☐ No
NEW	17-10 Tank 6416 (Clovelly Dome)		Tank CAP (GRP003)	600,000 bbl	☑ Yes ☐ No
NEW	18-10 Tank 6417 (Clovelly Dome)		Tank CAP (GRP003)	600,000 bbl	☑ Yes ☐ No
NEW	19-10 Tank 6418 (Clovelly Dome)		Tank CAP (GRP003)	600,000 bbl	☑ Yes ☐ No
NEW	20-10 Tank 6419 (Clovelly Dome)		Tank CAP (GRP003)	600,000 bbl	☑ Yes ☐ No
NEW	21-10 Tank 6420 (Clovelly Dome)		Tank CAP (GRP003)	600,000 bbl	☑ Yes ☐ No

24. Emissions Inventory Questionnaire (EIQ) Forms [LAC 33:III.517.D.3; 517.D.6]

Complete one (1) EIQ for:

- Each emission source. If two emission sources have a common stack, the applicant may submit one EIQ sheet for the common emissions point. Note any emissions sources that route to this common point in Table 4 of the application.
- Each emissions CAP that is proposed. In general, this applies to each source that is part of the CAP.
- Each alternate operating scenario that a source may operate under. Some common scenarios are:
    1. Sources that combust multiple fuels
    2. Sources that have Startup/Shutdown max lb/hr emission rates higher than the max lb/hr for normal operating conditions would need an EIQ for the Startup/Shutdown emission rates for those sources
- Fugitive emissions releases. One (1) EIQ should be completed for each of the following types of fugitive emissions sources or emissions points:
    1. Equipment leaks.
    2. Non-equipment leaks (i.e. road dust, settling ponds, etc).

For each EIQ:

- Fill in all requested information.
- Speciate all Toxic Air Pollutants and Hazardous Air Pollutants emitted by the source.
- Use appropriate significant figures.
- Consult instructions.

The EIQ is in Microsoft Word Excel. Click on this link to get to the EIQ form.
http://www.deq.louisiana.gov/portal/LinkClick.aspx?link=permits%2fair%2f6-6-07_EIQ.xls&tabid=2758

See Section 3.0

25. NSR Applicability Summary [LAC 33:III.504 and LAC 33:III.509] ☒ N/A

This section consists of five tables, A-E, and is applicable only to new and existing major stationary sources (as defined in LAC 33:III.504 or in LAC 33:III.509) proposing to permit a physical change or change in the method of operation. It would also apply to existing minor stationary sources proposing a physical change or change in the method of operation where the change would be a major source in and of itself. Add rows to each table as necessary. Provide a written explanation of the information summarized in these tables. Consult instructions.

25.A. Project Summary

		A	B	C	D	E	F
Emission Point ID	**Description**	**New, Modified, Affected, or Unaffected***	**Pre-Project Allowables (TPY)**	**Baseline Actual Emissions (over 24-month period)**	**Projected Actual Emissions (TPY)**	**Post-Project Potential to Emit (TPY)**	**Change**
PM_{10}	**24-Month Period:** MM/DD/YYYY – MM/DD/YYYY						
						PM_{10} Change:	
SO_2	**24-Month Period:** MM/DD/YYYY – MM/DD/YYYY						
						SO_2 Change:	
NO_X	**24-Month Period:** MM/DD/YYYY – MM/DD/YYYY						
						NO_X Change:	
CO	**24-Month Period:** MM/DD/YYYY – MM/DD/YYYY						
						CO Change:	

VOC	24-Month Period: MM/DD/YYYY – MM/DD/YYYY						
						VOC Change:	

* Unaffected emissions units are not required to be listed individually. By choosing not to list unaffected emissions units, the applicant asserts that all emissions units not listed in Table 24.A will not be modified or experience an increase in actual annual emissions as part of the proposed project.

25.B. Creditable Contemporaneous Changes

Contemporaneous Period: MM/DD/YYYY – MM/DD/YYYY	

		A	B	C	D	E	F
Emission Point ID	Description	Date of Modification	Pre-Project Allowables (TPY)	Baseline Actual Emissions (over 24-month period)	24-Month Period	Post-Project Potential to Emit (TPY)	Change
PM_{10}							
						PM_{10} Change:	
SO_2							
						SO_2 Change:	
NO_X							

25.B. Creditable Contemporaneous Changes

						NO_X Change:	

CO							
						CO Change:	

VOC							
						VOC Change:	

25.C. BACT/LAER Summary

For each source identified as "New" or "Modified" in Section 24.A, complete the following table for each pollutant that will trigger NSR. If LAER is not required per LAC 33:III.504.D.3, indicate such.

Emission Point ID	Pollutant	BACT/LAER	Limitation	Averaging Period	Description of Control Technology/Work Practice Standard(s)

25.D. PSD Air Quality Analyses Summary

		A	B	C	D	E	F	G	H	I	J	K
Pollutant	Averaging Period	Preliminary Screening Concentration ($\mu g/m^3$)	Level of Significant Impact ($\mu g/m^3$)	Significant Monitoring Concentration ($\mu g/m^3$)	At the Monitoring Station: Monitored Values ($\mu g/m^3$)	At the Monitoring Station: Modeling Results ($\mu g/m^3$)	Background ($\mu g/m^3$)	Maximum Modeled Concentration ($\mu g/m^3$)	Modeled + Background Concentration ($\mu g/m^3$)	NAAQS ($\mu g/m^3$)	Modeled PSD Increment Consumption ($\mu g/m^3$)	Allowable Class II PSD Increment ($\mu g/m^3$)
PM_{10}	24-hour		5	10						150		30
	Annual		1	-						50		17
SO_2	3-hour		25	-						1300		512
	24-hour		5	13						365		91
	Annual		1	-						80		20
NO_X	Annual		1	14						100		25
CO	1-hour		2000	-						40,000	-	-
	8-hour		500	575						10,000	-	-
Lead	3-month		-	0.1						1.5	-	-

NR = Not required.

25.E Nonattainment New Source Review Offsets [LAC 33:III.517.D.16, LAC 33:III.504.D.4 & 5] ☒ N/A

Complete this section only if the proposed project triggers Nonattainment New Source Review (NNSR).

This project triggers NNSR review for: ☐ **NO_X** ☐ **VOC**

NO_X:

Is the applicant proposing to use internal offsets? ☐ **Yes** ☐ **No**

If not, identify the source of the offsets. **Company:** _____

Facility/Unit: _____

Permit No.: _____

Is an ERC Bank Application included with this application, or has an application already been submitted to LDEQ?

☐ **Yes** ☐ **No**

If the ERC application has already been submitted, give the date: _____

Identify the emissions units from which the offsets will be obtained (reference specific Emission Point ID numbers).

VOC:

Is the applicant proposing to use internal offsets? ☐ **Yes** ☐ **No**

If not, identify the source of the offsets. **Company:** _____

Facility/Unit: _____

Permit No.: _____

Is an ERC Bank Application included with this application, or has an application already been submitted to LDEQ?

☐ **Yes** ☐ **No**

If the ERC application has already been submitted, give the date: _____

Identify the emissions units from which the offsets will be obtained (reference specific Emission Point ID numbers).

In order to expedite processing, please be sure the ERC Bank Application is completed properly. In the case of NO_X, the document should clearly differentiate between ozone season and non-ozone season actual emissions during the baseline period. Regarding NO_X and VOC, be sure to indicate if a portion of the reductions are no longer surplus (e.g., due to new or revised federal or state regulations, use in a netting analysis, etc.).

25.F. Economic Impact

Answer the following questions.

How many temporary jobs will be added as a result of this project? _____

How many permanent jobs will be added as a result of this project? _____

25.G Notification of Federal Land Manager [LAC 33:III.504.E.1, LAC 33:III.509.P.1]
Complete this section only if the proposed project triggers NNSR or PSD.

a. Is the proposed facility or modification located within 100 kilometers of a Class I Area? ☐ **Yes** ☐ **No**
If Yes, determination of Q/d is not required; skip to the next question. If No, complete the Q/d equation below:

$$Q/d = \frac{PM_{10\,(NEI)} + SO_{2\,(NEI)} + NO_{X\,(NEI)} + H_2SO_{4\,(NEI)}}{\text{Class I km}}$$

where:
$PM_{10\,(NEI)}$ = net emissions increase of PM_{10}[1,2]
$SO_{2\,(NEI)}$ = net emissions increase of SO_2[1,2]
$NO_{X\,(NEI)}$ = net emissions increase of NO_X[1,2]
$H_2SO_{4\,(NEI)}$ = net emissions increase of H_2SO_4[1,2]
Class I km = distance to nearest Class I Area[3]

$$Q/d = \frac{\_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_}{\_\_\_\_\_} = \_\_\_\_\_$$

If Q/D < 4, proceed to Section 26. If Q/D ≥ 4, complete the remainder of this Section.

b. Has the applicant provided a copy of the application to the Federal Land Manager? ☐ **Yes** ☐ **No**

c. Does the application contain modeling that demonstrates no adverse impact on Air Quality Related Values (AQRVs) in the Class I Area? ☐ **Yes** ☐ **No**

d. If Yes, indicate the model used: ☐ **VISCREEN** ☐ **PLUVUE II** ☐ **CALPUFF** ☐ **Other:**[4] _____

e. Has the Federal Land Manager concurred that the proposed project will not adversely impact any AQRVs?
☐ **Yes** ☐ **No** If Yes, please attach correspondence.

[1]If the net emissions increase of any pollutant is negative, enter "0."
[2]If the project did not trigger a netting analysis, use the project increase. In this case, the value will be less than the pollutant's significance level.
[3]In kilometers.
[4]Model must be approved by LDEQ and the Federal Land Manager.

26. Environmental Assessment Statement (EAS or "IT" Question Responses)

[La. R.S. 30:2018] ☒ **Yes** ☐ **No**

*** This section is required when applying for new Part 70 operating permits and/or major modifications. Any applications for these permit types that do not include answers to these questions will not be considered to be administratively complete.* **** See Appendix C**

For new Part 70 operating permits and/or major modifications, answers to these questions must be provided by the applicant to the local governmental authority and the designated public library at no additional costs to these entities. Consult instructions to determine what is considered to be a "local governmental authority" and a "designated public library". Indicate the name and address of the local governmental authority and the designated public library to which the answers to these questions were sent:

Name of Local Governing Authority			**Name of Designated Public Library**		
Lafourche Parish Council District 9			Lafourche Parish Public Library – Golden Meadow Branch		
Street or P.O. Box			**Street or P.O. Box**		
PO Box 183			1403 North Bayou Drive		
City	**State**	**ZIP**	**City**	**State**	**ZIP**
Golden Meadow	LA	70357	Golden Meadow	LA	70357-2513

Answer the following five questions on separate pages using full and complete answers. Include as many pages as necessary in order to provide full and complete answers. This information is required per Louisiana Revised Statutes 30:2018 (La. R.S. 30:2018).

Question 1: **Have the potential and real adverse environmental effects of the proposed facility been avoided to the maximum extent possible?** (This question requires the permittee to identify adverse environmental effects, both potential and real.)

Question 2: **Does a cost benefit analysis of the environmental impact costs balanced against the social and economic benefits of the proposed facility demonstrate that the latter outweighs the former?** (This question requires the permittee to perform a cost-benefit analysis, or at least a quantitative indication of the economic benefits and a qualitative description of the negative impacts expected from the permittee's operation. The latter should come from the answer to Question 1.)

Question 3: **Are there alternative projects which would offer more protection to the environment than the proposed facility without unduly curtailing non-environmental benefits?** (This question requires the permittee to demonstrate having considered alternate technologies.)

Question 4: **Are there alternative sites which would offer more protection to the environment than the proposed facility site without unduly curtailing non-environmental benefits?** (This is the question that deals directly with siting criteria.)

Question 5: **Are there mitigating measures which would offer more protection to the environment than the facility as proposed without unduly curtailing non-environmental benefits?** (This question requires the permittee to demonstrate having considered the most stringent techniques for reducing or more efficiently handling waste.)

SECTION 3.0

EMISSIONS INVENTORY QUESTIONNAIRE FOR AIR POLLUTANTS

State of Louisiana
Emissions Inventory Questionnaire (EIQ) for Air Pollutants
LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
Tempo Subject Item ID No.: GRP003	Crude Oil Storage Tank CAP (Clovelly Dome)	Method: 27,"Unknown" Datum: NAD27 UTM Zone: 15 Horizontal: 766300 mE Vertical: 3263500 mN Latitude: 29 ° 27 ' 45 " hundredths Longitude: 90 ° 18 ' 20 " hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
no	n/a ft ft^2	n/a ft	n/a ft/sec	n/a ft^3/min	n/a °F	8,760 hr/yr		25%	25%	25%	25%

Fuel	Type of Fuel Used and Heat Input (see instructions)	
	Type of Fuel	Heat Input (MMBTU/hr)
a		
b		
c		

Notes

Tank Cap consists of point sources EQT027 - EQT040, plus new tanks (6).

Operating Parameters (include units)		
	Parameter	Description
Normal Operating Rate/Throughput		
Maximum Operating Rate/Throughput		
Design Capacity/Volume		
Shell Height (ft)		
Tank Diameter (ft)		

☐ Fixed Roof ☐ Floating Roof ☐ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID) / Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Total VOC (including those listed below)				40.02		175.28	88.39	C		ppm by vol
Benzene			00071-43-2	0.23		1.03	0.890	C		ppm by vol
Cumene			00098-82-8	<0.01		0.02	0.021	U		ppm by vol
Ethyl benzene			00100-41-4	0.03		0.11	0.112	C		ppm by vol
n-Hexane			00110-54-3	0.25		1.07	0.920	C		ppm by vol
Toluene			00108-88-3	0.13		0.58	0.539	C		ppm by vol
Xylene (mixed isomers)			#N/A	0.08		0.35	0.364	C		ppm by vol

State of Louisiana
Emissions Inventory Questionnaire (EIQ) for Air Pollutants
LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
1-99	Tank 6401 (Clovelly Dome)	Method: 27,"Unknown" Datum: NAD27
Tempo Subject Item ID No.: EQT027		UTM Zone: 15 Horizontal: 764302 mE Vertical: 3261267 mN
		Latitude: 29 ° 27 ' 10 " 60 hundredths
		Longitude: 90 ° 16 ' 29 " 97 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
no	n/a ft / ft²	n/a ft	n/a ft/sec	n/a ft^3/min	n/a °F	8,760 hr/yr	Jan 2000 constructed	25%	25%	25%	25%

Fuel	Type of Fuel Used and Heat Input (see instructions)		
		Type of Fuel	Heat Input (MMBTU/hr)
	a	n/a	
	b		
	c		

Notes

Under CAP; Revised for RVP 8.

Operating Parameters (include units)		
	Parameter	Description
Normal Operating Rate/Throughput		
Maximum Operating Rate/Throughput		
Design Capacity/Volume	600,000	bbl
Shell Height (ft)		
Tank Diameter (ft)	310	feet

☐ Fixed Roof ☐ Floating Roof ☑ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID): 1-99 / Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Total VOC (including those listed below)					5252.21		Capped	C		ppm by vol
Benzene			00071-43-2		30.66		Capped	C		ppm by vol
Cumene			00098-82-8		0.23		Capped	C		ppm by vol
Ethyl benzene			00100-41-4		2.03		Capped	C		ppm by vol
Toluene			00108-88-3		14.93		Capped	C		ppm by vol
Xylene (mixed isomers)			#N/A		5.95		Capped	C		ppm by vol
n-Hexane			00110-54-3		32.94		Capped	C		ppm by vol

State of Louisiana
Emissions Inventory Questionnaire (EIQ) for Air Pollutants
LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
2-99	Tank 6402 (Clovelly Dome)	Method: 27,"Unknown" Datum: NAD27
Tempo Subject Item ID No.: EQT028		UTM Zone: 15 Horizontal: 764302 mE Vertical: 3261267 mN
		Latitude: 29 ° 27 ' 10 " 60 hundredths
		Longitude: 90 ° 16 ' 29 " 97 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
no	n/a ft / ft²	n/a ft	n/a ft/sec	n/a ft^3/min	n/a °F	8,760 hr/yr	Jan 2000 constructed	25%	25%	25%	25%

Type of Fuel Used and Heat Input (see instructions)

Fuel		Type of Fuel	Heat Input (MMBTU/hr)
	a	n/a	
	b		
	c		

Notes

Under CAP; Revised for RVP 8.

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput		
Maximum Operating Rate/Throughput		
Design Capacity/Volume	600,000	bbl
Shell Height (ft)		
Tank Diameter (ft)	310	feet

☐ Fixed Roof ☐ Floating Roof ☑ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID): 2-99 / Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Total VOC (including those listed below)					5252.21		Capped	C		ppm by vol
Benzene			00071-43-2		30.66		Capped	C		ppm by vol
Cumene			00098-82-8		0.23		Capped	C		ppm by vol
Ethyl benzene			00100-41-4		2.03		Capped	C		ppm by vol
Toluene			00108-88-3		14.93		Capped	C		ppm by vol
Xylene (mixed isomers)			#N/A		5.95		Capped	C		ppm by vol
n-Hexane			00110-54-3		32.94		Capped	C		ppm by vol

State of Louisiana
Emissions Inventory Questionnaire (EIQ) for Air Pollutants
LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
3-99	Tank 6405 (Clovelly Dome)	Method 27,"Unknown" Datum NAD27
Tempo Subject Item ID No.		UTM Zone 15 Horizontal 764302 mE Vertical 3261267 mN
EQT029		Latitude 29 ° 27 ' 10 " 60 hundredths
		Longitude 90 ° 16 ' 29 " 97 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
no	n/a ft ft²	n/a ft	n/a ft/sec	n/a ft^3/min	n/a °F	8,760 hr/yr	Jan | 2000 constructed	25%	25%	25%	25%

Type of Fuel Used and Heat Input (see instructions)

Fuel		Type of Fuel	Heat Input (MMBTU/hr)
	a	n/a	
	b		
	c		

Notes

Under CAP; Revised for RVP 8.

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput		
Maximum Operating Rate/Throughput		
Design Capacity/Volume	600,000	bbl
Shell Height (ft)		
Tank Diameter (ft)	310	feet

☐ Fixed Roof Floating Roof ☑ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID)	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
Pollutant				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
3-99										
Total VOC (including those listed below)					5252.21		Capped	C		ppm by vol
Benzene			00071-43-2		30.66		Capped	C		ppm by vol
Cumene			00098-82-8		0.23		Capped	C		ppm by vol
Ethyl benzene			00100-41-4		2.03		Capped	C		ppm by vol
Toluene			00108-88-3		14.93		Capped	C		ppm by vol
Xylene (mixed isomers)			#N/A		5.95		Capped	C		ppm by vol
n-Hexane			00110-54-3		32.94		Capped	C		ppm by vol

State of Louisiana

Emissions Inventory Questionnaire (EIQ) for Air Pollutants

LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
4-99	Tank 6406 (Clovelly Dome)	Method: 27,"Unknown" Datum: NAD27
Tempo Subject Item ID No.: EQT030		UTM Zone: 15 Horizontal: 764302 mE Vertical: 3261267 mN
		Latitude: 29 ° 27 ' 10 " 60 hundredths
		Longitude: 90 ° 16 ' 29 " 97 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
no	n/a ft / ft²	n/a ft	n/a ft/sec	n/a ft^3/min	n/a °F	8,760 hr/yr	Jan 2000 constructed	25%	25%	25%	25%

Fuel — Type of Fuel Used and Heat Input (see instructions)

	Type of Fuel	Heat Input (MMBTU/hr)
a	n/a	
b		
c		

Notes

Under CAP, Revised for RVP 8.

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput		
Maximum Operating Rate/Throughput		
Design Capacity/Volume	600,000	bbl
Shell Height (ft)		
Tank Diameter (ft)	310	feet

☐ Fixed Roof ☐ Floating Roof ☑ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID): 4-99 / Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Total VOC (including those listed below)					5252.21		Capped	C		ppm by vol
Benzene			00071-43-2		30.66		Capped	C		ppm by vol
Cumene			00098-82-8		0.23		Capped	C		ppm by vol
Ethyl benzene			00100-41-4		2.03		Capped	C		ppm by vol
Toluene			00108-88-3		14.93		Capped	C		ppm by vol
Xylene (mixed isomers)			#N/A		5.95		Capped	C		ppm by vol
n-Hexane			00110-54-3		32.94		Capped	C		ppm by vol

State of Louisiana

Emissions Inventory Questionnaire (EIQ) for Air Pollutants

LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
6-02	Tank 6409 (Clovelly Dome)	Method 27,"Unknown" Datum NAD27
Tempo Subject Item ID No.		UTM Zone 15 Horizontal 764302 mE Vertical 3261267 mN
EQT031		Latitude 29 ° 27 ' 10 " 60 hundredths
		Longitude 90 ° 16 ' 29 " 97 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
no	n/a ft / ft²	n/a ft	n/a ft/sec	n/a ft^3/min	n/a °F	8,760 hr/yr	Mar 2000 constructed	25%	25%	25%	25%

Fuel	Type of Fuel Used and Heat Input (see instructions)		
		Type of Fuel	Heat Input (MMBTU/hr)
	a	n/a	
	b		
	c		

Notes

Under CAP; Revised for RVP 8.

Operating Parameters (include units)		
	Parameter	Description
Normal Operating Rate/Throughput		
Maximum Operating Rate/Throughput		
Design Capacity/Volume	600,000	bbl
Shell Height (ft)		
Tank Diameter (ft)	310	feet

☐ Fixed Roof Floating Roof ☑ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID): 6-02	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
Pollutant				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Total VOC (including those listed below)					5252.21		Capped	C		ppm by vol
Benzene			00071-43-2		30.66		Capped	C		ppm by vol
Cumene			00098-82-8		0.23		Capped	C		ppm by vol
Ethyl benzene			00100-41-4		2.03		Capped	C		ppm by vol
Toluene			00108-88-3		14.93		Capped	C		ppm by vol
Xylene (mixed isomers)			#N/A		5.95		Capped	C		ppm by vol
n-Hexane			00110-54-3		32.94		Capped	C		ppm by vol

State of Louisiana
Emissions Inventory Questionnaire (EIQ) for Air Pollutants
LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
7-02	Tank 6410 (Clovelly Dome)	Method 27,"Unknown" Datum NAD27
Tempo Subject Item ID No.		UTM Zone 15 Horizontal 764302 mE Vertical 3261267 mN
EQT032		Latitude 29 ° 27 ' 10 " 60 hundredths
		Longitude 90 ° 16 ' 29 " 97 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
no	n/a ft / ft²	n/a ft	n/a ft/sec	n/a ft^3/min	n/a °F	8,760 hr/yr	Mar 2000 constructed	25%	25%	25%	25%

Fuel

	Type of Fuel Used and Heat Input (see instructions)	
	Type of Fuel	Heat Input (MMBTU/hr)
a	n/a	
b		
c		

Notes

Under CAP; Revised for RVP 8.

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput		
Maximum Operating Rate/Throughput		
Design Capacity/Volume	600,000	bbl
Shell Height (ft)		
Tank Diameter (ft)	310	feet

☐ Fixed Roof Floating Roof ☑ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID) / Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
7-02										
Total VOC (including those listed below)					5252.21		Capped	C		ppm by vol
Benzene			00071-43-2		30.66		Capped	C		ppm by vol
Cumene			00098-82-8		0.23		Capped	C		ppm by vol
Ethyl benzene			00100-41-4		2.03		Capped	C		ppm by vol
Toluene			00108-88-3		14.93		Capped	C		ppm by vol
Xylene (mixed isomers)			#N/A		5.95		Capped	C		ppm by vol
n-Hexane			00110-54-3		32.94		Capped	C		ppm by vol

State of Louisiana
Emissions Inventory Questionnaire (EIQ) for Air Pollutants
LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
8-07	Tank 6403 (Clovelly Dome)	Method 27,"Unknown" Datum NAD27
Tempo Subject Item ID No.		UTM Zone 15 Horizontal 764302 mE Vertical 3261267 mN
EQT033		Latitude 29 ° 27 ' 10 " 60 hundredths
		Longitude 90 ° 16 ' 29 " 97 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
no	n/a ft ft^2	n/a ft	n/a ft/sec	n/a ft^3/min	n/a °F	8,760 hr/yr	constructed	25%	25%	25%	25%

Fuel — Type of Fuel Used and Heat Input (see instructions)

	Type of Fuel	Heat Input (MMBTU/hr)
a	n/a	
b		
c		

Notes

Under CAP; Revised for RVP 8.

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput		
Maximum Operating Rate/Throughput		
Design Capacity/Volume	600,000	bbl
Shell Height (ft)		
Tank Diameter (ft)	310	feet

☐ Fixed Roof ☐ Floating Roof ☑ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID) / Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
8-07										
Total VOC (including those listed below)					5252.21		Capped	C		ppm by vol
Benzene			00071-43-2		30.66		Capped	C		ppm by vol
Cumene			00098-82-8		0.23		Capped	C		ppm by vol
Ethyl benzene			00100-41-4		2.03		Capped	C		ppm by vol
Toluene			00108-88-3		14.93		Capped	C		ppm by vol
Xylene (mixed isomers)			#N/A		5.95		Capped	C		ppm by vol
n-Hexane			00110-54-3		32.94		Capped	C		ppm by vol

State of Louisiana
Emissions Inventory Questionnaire (EIQ) for Air Pollutants
LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
9-07	Tank 6404 (Clovelly Dome)	Method 27,"Unknown" Datum NAD27
Tempo Subject Item ID No.		UTM Zone 15 Horizontal 764302 mE Vertical 3261267 mN
EQT034		Latitude 29 ° 27 ' 10 " 60 hundredths
		Longitude 90 ° 16 ' 29 " 97 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
no	n/a ft / ft²	n/a ft	n/a ft/sec	n/a ft^3/min	n/a °F	8,760 hr/yr	constructed	25%	25%	25%	25%

Type of Fuel Used and Heat Input (see instructions)

Fuel		Type of Fuel	Heat Input (MMBTU/hr)
	a	n/a	
	b		
	c		

Notes

Under CAP; Revised for RVP 8.

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput		
Maximum Operating Rate/Throughput		
Design Capacity/Volume	600,000	bbl
Shell Height (ft)		
Tank Diameter (ft)	310	feet

☐ Fixed Roof ☐ Floating Roof ☑ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID): 9-07 / Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates: Average (lb/hr)	Proposed Emission Rates: Maximum (lbs/hr)	Proposed Emission Rates: Annual (tons/yr)	Permitted Emission Rate (Current): Annual (tons/yr)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
Total VOC (including those listed below)					5252.21		Capped	C		ppm by vol
Benzene			00071-43-2		30.66		Capped	C		ppm by vol
Cumene			00098-82-8		0.23		Capped	C		ppm by vol
Ethyl benzene			00100-41-4		2.03		Capped	C		ppm by vol
Toluene			00108-88-3		14.93		Capped	C		ppm by vol
Xylene (mixed isomers)			#N/A		5.95		Capped	C		ppm by vol
n-Hexane			00110-54-3		32.94		Capped	C		ppm by vol

State of Louisiana

Emissions Inventory Questionnaire (EIQ) for Air Pollutants

LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
10-07	Tank 6407 (Clovelly Dome)	Method 27,"Unknown" Datum NAD27
Tempo Subject Item ID No.		UTM Zone 15 Horizontal 764302 mE Vertical 3261267 mN
EQT035		Latitude 29 ° 27 ' 10 " 60 hundredths
		Longitude 90 ° 16 ' 29 " 97 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
no	n/a ft / ft²	n/a ft	n/a ft/sec	n/a ft^3/min	n/a °F	8,760 hr/yr	constructed	25%	25%	25%	25%

Fuel — Type of Fuel Used and Heat Input (see instructions)

	Type of Fuel	Heat Input (MMBTU/hr)
a	n/a	
b		
c		

Notes

Under CAP; Revised for RVP 8.

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput		
Maximum Operating Rate/Throughput		
Design Capacity/Volume	600,000	bbl
Shell Height (ft)		
Tank Diameter (ft)	310	feet

☐ Fixed Roof ☐ Floating Roof ☑ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID) / Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
10-07										
Total VOC (including those listed below)					5252.21		Capped	C		ppm by vol
Benzene			00071-43-2		30.66		Capped	C		ppm by vol
Cumene			00098-82-8		0.23		Capped	C		ppm by vol
Ethyl benzene			00100-41-4		2.03		Capped	C		ppm by vol
Toluene			00108-88-3		14.93		Capped	C		ppm by vol
Xylene (mixed isomers)			#N/A		5.95		Capped	C		ppm by vol
n-Hexane			00110-54-3		32.94		Capped	C		ppm by vol

State of Louisiana
Emissions Inventory Questionnaire (EIQ) for Air Pollutants
LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
11-07	Tank 6408 (Clovelly Dome)	Method 27,"Unknown" Datum NAD27
Tempo Subject Item ID No.		UTM Zone 15 Horizontal 764302 mE Vertical 3261267 mN
EQT036		Latitude 29 ° 27 ' 10 " 60 hundredths
		Longitude 90 ° 16 ' 29 " 97 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
no	n/a ft / ft²	n/a ft	n/a ft/sec	n/a ft^3/min	n/a °F	8,760 hr/yr	constructed	25%	25%	25%	25%

Type of Fuel Used and Heat Input (see instructions)

Fuel		Type of Fuel	Heat Input (MMBTU/hr)
	a	n/a	
	b		
	c		

Notes

Under CAP; Revised for RVP 8.

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput		
Maximum Operating Rate/Throughput		
Design Capacity/Volume	600,000	bbl
Shell Height (ft)		
Tank Diameter (ft)	310	feet

☐ Fixed Roof ☐ Floating Roof ☑ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID) / Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
11-07										
Total VOC (including those listed below)					5252.21		Capped	C		ppm by vol
Benzene			00071-43-2		30.66		Capped	C		ppm by vol
Cumene			00098-82-8		0.23		Capped	C		ppm by vol
Ethyl benzene			00100-41-4		2.03		Capped	C		ppm by vol
Toluene			00108-88-3		14.93		Capped	C		ppm by vol
Xylene (mixed isomers)			#N/A		5.95		Capped	C		ppm by vol
n-Hexane			00110-54-3		32.94		Capped	C		ppm by vol

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Emissions Inventory Questionnaire (EIQ) for Air Pollutants

LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
12-07	Tank 6411 (Clovelly Dome)	Method: 27,"Unknown" Datum: NAD27
Tempo Subject Item ID No.: EQT037		UTM Zone: 15 Horizontal: 764302 mE Vertical: 3261267 mN
		Latitude: 29 ° 27 ' 10 " 60 hundredths
		Longitude: 90 ° 16 ' 29 " 97 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
no	n/a ft / ft²	n/a ft	n/a ft/sec	n/a ft^3/min	n/a °F	8,760 hr/yr	constructed	25%	25%	25%	25%

Fuel

	Type of Fuel	Heat Input (MMBTU/hr)
a	n/a	
b		
c		

Notes

Under CAP; Revised for RVP 8.

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput		
Maximum Operating Rate/Throughput		
Design Capacity/Volume	600,000	bbl
Shell Height (ft)		
Tank Diameter (ft)	310	feet

☐ Fixed Roof ☐ Floating Roof ☑ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID) / Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
12-07										
Total VOC (including those listed below)					5252.21		Capped	C		ppm by vol
Benzene			00071-43-2		30.66		Capped	C		ppm by vol
Cumene			00098-82-8		0.23		Capped	C		ppm by vol
Ethyl benzene			00100-41-4		2.03		Capped	C		ppm by vol
Toluene			00108-88-3		14.93		Capped	C		ppm by vol
Xylene (mixed isomers)			#N/A		5.95		Capped	C		ppm by vol
n-Hexane			00110-54-3		32.94		Capped	C		ppm by vol

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Emissions Inventory Questionnaire (EIQ) for Air Pollutants
LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
13-07	Tank 6412 (Clovelly Dome)	Method 27,"Unknown" Datum NAD27
Tempo Subject Item ID No.		UTM Zone 15 Horizontal 764302 mE Vertical 3261267 mN
EQT038		Latitude 29 ° 27 ' 10 " 60 hundredths
		Longitude 90 ° 16 ' 29 " 97 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
no	n/a ft ft^2	n/a ft	n/a ft/sec	n/a ft^3/min	n/a °F	8,760 hr/yr	constructed	25%	25%	25%	25%

Type of Fuel Used and Heat Input (see instructions)

Fuel		Type of Fuel	Heat Input (MMBTU/hr)
	a	n/a	
	b		
	c		

Notes

Under CAP; Revised for RVP 8.

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput		
Maximum Operating Rate/Throughput		
Design Capacity/Volume	600,000	bbl
Shell Height (ft)		
Tank Diameter (ft)	310	feet

☐ Fixed Roof ☐ Floating Roof ☑ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID) / Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
13-07										
Total VOC (including those listed below)					5252.21		Capped	C		ppm by vol
Benzene			00071-43-2		30.66		Capped	C		ppm by vol
Cumene			00098-82-8		0.23		Capped	C		ppm by vol
Ethyl benzene			00100-41-4		2.03		Capped	C		ppm by vol
Toluene			00108-88-3		14.93		Capped	C		ppm by vol
Xylene (mixed isomers)			#N/A		5.95		Capped	C		ppm by vol
n-Hexane			00110-54-3		32.94		Capped	C		ppm by vol

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Emissions Inventory Questionnaire (EIQ) for Air Pollutants

LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
14-07	Tank 6413 (Clovelly Dome)	Method 27,"Unknown" Datum NAD27
Tempo Subject Item ID No.		UTM Zone 15 Horizontal 764302 mE Vertical 3261267 mN
EQT039		Latitude 29 ° 27 ' 10 " 60 hundredths
		Longitude 90 ° 16 ' 29 " 97 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
no	n/a ft ft^2	n/a ft	n/a ft/sec	n/a ft^3/min	n/a °F	8,760 hr/yr		25%	25%	25%	25%

Fuel		Type of Fuel Used and Heat Input (see instructions)	
		Type of Fuel	Heat Input (MMBTU/hr)
	a	n/a	
	b		
	c		

Notes

Under CAP; Revised for RVP 8.

Operating Parameters (include units)		
	Parameter	Description
Normal Operating Rate/Throughput		
Maximum Operating Rate/Throughput		
Design Capacity/Volume	600,000	bbl
Shell Height (ft)		
Tank Diameter (ft)	310	feet

☐ Fixed Roof ☐ Floating Roof ☑ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID): 14-07 Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Total VOC (including those listed below)					5252.21		Capped	C		ppm by vol
Benzene			00071-43-2		30.66		Capped	C		ppm by vol
Cumene			00098-82-8		0.23		Capped	C		ppm by vol
Ethyl benzene			00100-41-4		2.03		Capped	C		ppm by vol
Toluene			00108-88-3		14.93		Capped	C		ppm by vol
Xylene (mixed isomers)			#N/A		5.95		Capped	C		ppm by vol
n-Hexane			00110-54-3		32.94		Capped	C		ppm by vol

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Emissions Inventory Questionnaire (EIQ) for Air Pollutants
LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
15-07	Tank 6414 (Clovelly Dome)	Method: 27,"Unknown" Datum: NAD27
Tempo Subject Item ID No.: EQT040		UTM Zone: 15 Horizontal: 764302 mE Vertical: 3261267 mN
		Latitude: 29 ° 27 ' 10 " 60 hundredths
		Longitude: 90 ° 16 ' 29 " 97 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
no	n/a ft / ft²	n/a ft	n/a ft/sec	n/a ft^3/min	n/a °F	8,760 hr/yr		25%	25%	25%	25%

Type of Fuel Used and Heat Input (see instructions)

Fuel	Type of Fuel	Heat Input (MMBTU/hr)
a	n/a	
b		
c		

Notes

Under CAP; Revised for RVP 8.

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput		
Maximum Operating Rate/Throughput		
Design Capacity/Volume	600,000	bbl
Shell Height (ft)		
Tank Diameter (ft)	310	feet

☐ Fixed Roof ☐ Floating Roof ☑ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID) / Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates: Average (lb/hr)	Proposed Emission Rates: Maximum (lbs/hr)	Proposed Emission Rates: Annual (tons/yr)	Permitted Emission Rate (Current): Annual (tons/yr)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
15-07										
Total VOC (including those listed below)					5252.21		Capped	C		ppm by vol
Benzene			00071-43-2		30.66		Capped	C		ppm by vol
Cumene			00098-82-8		0.23		Capped	C		ppm by vol
Ethyl benzene			00100-41-4		2.03		Capped	C		ppm by vol
Toluene			00108-88-3		14.93		Capped	C		ppm by vol
Xylene (mixed isomers)			#N/A		5.95		Capped	C		ppm by vol
n-Hexane			00110-54-3		32.94		Capped	C		ppm by vol

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Emissions Inventory Questionnaire (EIQ) for Air Pollutants

LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
16-10	Tank 6415 (Clovelly Dome)	Method: 27,"Unknown" Datum: NAD27
Tempo Subject Item ID No.		UTM Zone: 15 Horizontal: 764302 mE Vertical: 3261267 mN
		Latitude: 29 ° 27 ' 10 " 60 hundredths
		Longitude: 90 ° 16 ' 29 " 97 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
yes	n/a ft ft^2	n/a ft	n/a ft/sec	n/a ft^3/min	n/a °F	8,760 hr/yr	proposed	25%	25%	25%	25%

Type of Fuel Used and Heat Input (see instructions)

Fuel		Type of Fuel	Heat Input (MMBTU/hr)
	a	n/a	
	b		
	c		

Notes

Under CAP.

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput		
Maximum Operating Rate/Throughput		
Design Capacity/Volume	600,000	bbl
Shell Height (ft)		
Tank Diameter (ft)	310	feet

☐ Fixed Roof ☐ Floating Roof ☑ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID): 16-10	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
Pollutant				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Total VOC (including those listed below)					5252.21		Capped	A		ppm by vol
Benzene			00071-43-2		30.66		Capped	A		ppm by vol
Cumene			00098-82-8		0.23		Capped	A		ppm by vol
Ethyl benzene			00100-41-4		2.03		Capped	A		ppm by vol
Toluene			00108-88-3		14.93		Capped	A		ppm by vol
Xylene (mixed isomers)			#N/A		5.95		Capped	A		ppm by vol
n-Hexane			00110-54-3		32.94		Capped	A		ppm by vol

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Emissions Inventory Questionnaire (EIQ) for Air Pollutants
LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
17-10	Tank 6416 (Clovelly Dome)	Method 27,"Unknown" Datum NAD27
Tempo Subject Item ID No.		UTM Zone 15 Horizontal 764302 mE Vertical 3261267 mN
		Latitude 29 ° 27 ' 10 " 60 hundredths
		Longitude 90 ° 16 ' 29 " 97 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
yes	n/a ft ft^2	n/a ft	n/a ft/sec	n/a ft^3/min	n/a °F	8,760 hr/yr	proposed	25%	25%	25%	25%

Type of Fuel Used and Heat Input (see instructions)

Fuel		Type of Fuel	Heat Input (MMBTU/hr)
	a	n/a	
	b		
	c		

Notes
Under CAP.

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput		
Maximum Operating Rate/Throughput		
Design Capacity/Volume	600,000	bbl
Shell Height (ft)		
Tank Diameter (ft)	310	feet

☐ Fixed Roof ☐ Floating Roof ☑ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID) / Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
17-10										
Total VOC (including those listed below)					5252.21		Capped	A		ppm by vol
Benzene			00071-43-2		30.66		Capped	A		ppm by vol
Cumene			00098-82-8		0.23		Capped	A		ppm by vol
Ethyl benzene			00100-41-4		2.03		Capped	A		ppm by vol
Toluene			00108-88-3		14.93		Capped	A		ppm by vol
Xylene (mixed isomers)			#N/A		5.95		Capped	A		ppm by vol
n-Hexane			00110-54-3		32.94		Capped	A		ppm by vol

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LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
18-10	Tank 6417 (Clovelly Dome)	Method: 27,"Unknown" Datum: NAD27
Tempo Subject Item ID No.		UTM Zone: 15 Horizontal: 764302 mE Vertical: 3261267 mN
		Latitude: 29 ° 27 ' 10 " 60 hundredths
		Longitude: 90 ° 16 ' 29 " 97 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
yes	n/a ft / ft²	n/a ft	n/a ft/sec	n/a ft^3/min	n/a °F	8,760 hr/yr	proposed	25%	25%	25%	25%

Fuel — Type of Fuel Used and Heat Input (see instructions)

	Type of Fuel	Heat Input (MMBTU/hr)
a	n/a	
b		
c		

Notes

Under CAP.

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput		
Maximum Operating Rate/Throughput		
Design Capacity/Volume	600,000	bbl
Shell Height (ft)		
Tank Diameter (ft)	310	feet

☐ Fixed Roof ☐ Floating Roof ☑ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID) / Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates: Average (lb/hr)	Proposed Emission Rates: Maximum (lbs/hr)	Proposed Emission Rates: Annual (tons/yr)	Permitted Emission Rate (Current): Annual (tons/yr)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
18-10										
Total VOC (including those listed below)					5252.21		Capped	A		ppm by vol
Benzene			00071-43-2		30.66		Capped	A		ppm by vol
Cumene			00098-82-8		0.23		Capped	A		ppm by vol
Ethyl benzene			00100-41-4		2.03		Capped	A		ppm by vol
Toluene			00108-88-3		14.93		Capped	A		ppm by vol
Xylene (mixed isomers)			#N/A		5.95		Capped	A		ppm by vol
n-Hexane			00110-54-3		32.94		Capped	A		ppm by vol

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LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
19-10	Tank 6418 (Clovelly Dome)	Method 27,"Unknown" Datum NAD27
Tempo Subject Item ID No.		UTM Zone 15 Horizontal 764302 mE Vertical 3261267 mN
		Latitude 29 ° 27 ' 10 " 60 hundredths
		Longitude 90 ° 16 ' 29 " 97 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
yes	n/a ft ft²	n/a ft	n/a ft/sec	n/a ft^3/min	n/a °F	8,760 hr/yr	proposed	25%	25%	25%	25%

Type of Fuel Used and Heat Input (see instructions)

Fuel		Type of Fuel	Heat Input (MMBTU/hr)
	a	n/a	
	b		
	c		

Notes

Under CAP.

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput		
Maximum Operating Rate/Throughput		
Design Capacity/Volume	600,000	bbl
Shell Height (ft)		
Tank Diameter (ft)	310	feet

☐ Fixed Roof ☐ Floating Roof ☑ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID) 19-10 / Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Total VOC (including those listed below)					5252.21		Capped	A		ppm by vol
Benzene			00071-43-2		30.66		Capped	A		ppm by vol
Cumene			00098-82-8		0.23		Capped	A		ppm by vol
Ethyl benzene			00100-41-4		2.03		Capped	A		ppm by vol
Toluene			00108-88-3		14.93		Capped	A		ppm by vol
Xylene (mixed isomers)			#N/A		5.95		Capped	A		ppm by vol
n-Hexane			00110-54-3		32.94		Capped	A		ppm by vol

State of Louisiana

Emissions Inventory Questionnaire (EIQ) for Air Pollutants

LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
20-10	Tank 6419 (Clovelly Dome)	Method: 27,"Unknown" Datum: NAD27
Tempo Subject Item ID No.		UTM Zone: 15 Horizontal: 764302 mE Vertical: 3261267 mN
		Latitude: 29 ° 27 ' 10 " 60 hundredths
		Longitude: 90 ° 16 ' 29 " 97 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
yes	n/a ft ft²	n/a ft	n/a ft/sec	n/a ft^3/min	n/a °F	8,760 hr/yr	proposed	25%	25%	25%	25%

Type of Fuel Used and Heat Input (see instructions)

Fuel		Type of Fuel	Heat Input (MMBTU/hr)
	a	n/a	
	b		
	c		

Notes

Under CAP.

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput		
Maximum Operating Rate/Throughput		
Design Capacity/Volume	600,000	bbl
Shell Height (ft)		
Tank Diameter (ft)	310	feet

☐ Fixed Roof ☐ Floating Roof ☑ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID) / Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
20-10										
Total VOC (including those listed below)					5252.21		Capped	A		ppm by vol
Benzene			00071-43-2		30.66		Capped	A		ppm by vol
Cumene			00098-82-8		0.23		Capped	A		ppm by vol
Ethyl benzene			00100-41-4		2.03		Capped	A		ppm by vol
Toluene			00108-88-3		14.93		Capped	A		ppm by vol
Xylene (mixed isomers)			#N/A		5.95		Capped	A		ppm by vol
n-Hexane			00110-54-3		32.94		Capped	A		ppm by vol

State of Louisiana
Emissions Inventory Questionnaire (EIQ) for Air Pollutants
LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
21-10	Tank 6420 (Clovelly Dome)	Method 27,"Unknown" Datum NAD27
Tempo Subject Item ID No.		UTM Zone 15 Horizontal 764302 mE Vertical 3261267 mN
		Latitude 29 ° 27 ' 10 " 60 hundredths
		Longitude 90 ° 16 ' 29 " 97 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
yes	n/a ft ft²	n/a ft	n/a ft/sec	n/a ft^3/min	n/a °F	8,760 hr/yr	proposed	25%	25%	25%	25%

Type of Fuel Used and Heat Input (see instructions)

Fuel		Type of Fuel	Heat Input (MMBTU/hr)
	a	n/a	
	b		
	c		

Notes
Under CAP.

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput		
Maximum Operating Rate/Throughput		
Design Capacity/Volume	600,000	bbl
Shell Height (ft)		
Tank Diameter (ft)	310	feet

☐ Fixed Roof ☐ Floating Roof ☑ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID) 21-10 / Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Total VOC (including those listed below)					5252.21		Capped	A		ppm by vol
Benzene			00071-43-2		30.66		Capped	A		ppm by vol
Cumene			00098-82-8		0.23		Capped	A		ppm by vol
Ethyl benzene			00100-41-4		2.03		Capped	A		ppm by vol
Toluene			00108-88-3		14.93		Capped	A		ppm by vol
Xylene (mixed isomers)			#N/A		5.95		Capped	A		ppm by vol
n-Hexane			00110-54-3		32.94		Capped	A		ppm by vol

State of Louisiana

Emissions Inventory Questionnaire (EIQ) for Air Pollutants

LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
1-10	520 HP Emergency Generator	Method 27,"Unknown" Datum NAD27
Tempo Subject Item ID No.		UTM Zone 15 Horizontal 764302 mE Vertical 3261267 mN
EQT048		Latitude 29 ° 27 ' 10 " 60 hundredths
		Longitude 90 ° 16 ' 29 " 97 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
yes	0.5 ft ft^2	9.83 ft	220.69 ft/sec	2,600 ft^3/min	810 °F	500 hr/yr	proposed	25%	25%	25%	25%

Fuel — Type of Fuel Used and Heat Input (see instructions)

	Type of Fuel	Heat Input (MMBTU/hr)
a	Diesel	3.64
b		
c		

Notes

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	520	bhp
Maximum Operating Rate/Throughput	520	bhp
Design Capacity/Volume		
Shell Height (ft)		
Tank Diameter (ft)		

☐ Fixed Roof ☐ Floating Roof ☐ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID): 1-10	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
Pollutant				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Particulate matter (PM_{10})				0.64	0.64	0.16	n/a	A		gr/std ft^3
Sulfur dioxide				<0.01	<0.01	<0.01	n/a	A		ppm by vol
Nitrogen oxides				4.98	4.98	1.25	n/a	A		ppm by vol
Carbon monoxide				0.62	0.62	0.16	n/a	A		ppm by vol
Total VOC (including those listed below)				0.07	0.07	0.02	n/a	A		ppm by vol
Acetaldehyde			00075-07-0	0.003	0.003	<0.01	n/a	A		ppm by vol
Benzene			00071-43-2	0.003	0.003	<0.01	n/a	A		ppm by vol
Formaldehyde			00050-00-0	0.004	0.004	<0.01	n/a	A		ppm by vol

State of Louisiana
Emissions Inventory Questionnaire (EIQ) for Air Pollutants
LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
1-78	Crude Relief Tank (Clovelly Dome)	Method: 27,"Unknown" Datum: NAD27
Tempo Subject Item ID No.: EQT003		UTM Zone: 15 Horizontal: 766300 mE Vertical: 3263500 mN
		Latitude: 29 ° 28 ' 21 " 54 hundredths
		Longitude: 90 ° 15 ' 19 " 18 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
no	n/a ft / ft²	n/a ft	n/a ft/sec	n/a ft^3/min	n/a °F	8,760 hr/yr	constructed	25%	25%	25%	25%

Type of Fuel Used and Heat Input (see instructions)

Fuel		Type of Fuel	Heat Input (MMBTU/hr)
	a	n/a	
	b		
	c		

Notes

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	23.1	MM gal/yr
Maximum Operating Rate/Throughput		
Design Capacity/Volume	2.31	MM gal
Shell Height (ft)		
Tank Diameter (ft)	100	feet

☐ Fixed Roof ☐ Floating Roof ☑ External ☐ Internal

Air Pollutant Specific Information

Pollutant	Emission Point ID No. (Alternate ID)	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
					Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Total VOC (including those listed below)	1-78				0.38	0.38	1.65	1.65	U		ppm by vol
Benzene				00071-43-2	<0.01	<0.01	0.02	0.02	U		ppm by vol
Ethyl benzene				00100-41-4	<0.01	<0.01	<0.01	<0.01	U		ppm by vol
Toluene				00108-88-3	<0.01	<0.01	0.01	0.01	U		ppm by vol
Xylene (mixed isomers)				#N/A	<0.01	<0.01	0.01	0.01	U		ppm by vol
n-Hexane				00110-54-3	<0.01	<0.01	0.02	0.02	U		ppm by vol

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Emissions Inventory Questionnaire (EIQ) for Air Pollutants
LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
5-78	Slop Oil Tank (Small Boat Harbor)	Method 27,"Unknown" Datum NAD27
Tempo Subject Item ID No. EQT004		UTM Zone 15 Horizontal 771500 mE Vertical 3223800 mN
		Latitude 29 ° 6 ' 49 " 12 hundredths
		Longitude 90 ° 12 ' 36 " 18 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
no	n/a ft / ft²	n/a ft	n/a ft/sec	n/a ft^3/min	n/a °F	8,760 hr/yr	constructed	25%	25%	25%	25%

Type of Fuel Used and Heat Input (see instructions)

Fuel		Type of Fuel	Heat Input (MMBTU/hr)
	a	n/a	
	b		
	c		

Notes

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	84,000	gal/yr
Maximum Operating Rate/Throughput		
Design Capacity/Volume	79,315	gal
Shell Height (ft)	16	feet
Tank Diameter (ft)	30	feet

☑ Fixed Roof Floating Roof ☐ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID)	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
Pollutant				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Total VOC (including those listed below)				<0.01	<0.01	0.01	0.01	U		ppm by vol

State of Louisiana
Emissions Inventory Questionnaire (EIQ) for Air Pollutants
LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
7-78	Turbine Generator (Clovelly Dome)	Method _____ Datum _____
Tempo Subject Item ID No.		UTM Zone _____ Horizontal _____ mE Vertical _____ mN
EQT005		Latitude _____ ° _____ ' _____ " _____ hundredths
		Longitude _____ ° _____ ' _____ " _____ hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
yes	_____ ft _____ ft^2	_____ ft	_____ ft/sec	_____ ft^3/min	_____ °F	_____ hr/yr					

Fuel	Type of Fuel Used and Heat Input (see instructions)		
		Type of Fuel	Heat Input (MMBTU/hr)
	a		
	b		
	c		

Notes

Operating Parameters (include units)		
	Parameter	Description
Normal Operating Rate/Throughput		
Maximum Operating Rate/Throughput		
Design Capacity/Volume		
Shell Height (ft)		
Tank Diameter (ft)		

☐ Fixed Roof Floating Roof ☐ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID): 7-78	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
Pollutant				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Particulate matter (PM_{10})				0.00	0.00	0.00	0.52	D		gr/std ft^3
Sulfur dioxide				0.00	0.00	0.00	21.90	D		ppm by vol
Nitrogen oxides				0.00	0.00	0.00	38.16	D		ppm by vol
Carbon monoxide				0.00	0.00	0.00	0.14	D		ppm by vol
Total VOC (including those listed below)				0.00	0.00	0.00	0.02	D		ppm by vol

State of Louisiana
Emissions Inventory Questionnaire (EIQ) for Air Pollutants
LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
11-78	Fourchon Booster Station No. 2 Fuel Tank No.1	Method 27,"Unknown" Datum NAD27
Tempo Subject Item ID No. EQT006		UTM Zone 15 Horizontal 774800 mE Vertical 3228300 mN
		Latitude 29 ° 9 ' 12 " 59 hundredths
		Longitude 90 ° 10 ' 30 " 23 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
no	n/a ft ft^2	n/a ft	n/a ft/sec	n/a ft^3/min	n/a °F	8,760 hr/yr	constructed	25%	25%	25%	25%

Type of Fuel Used and Heat Input (see instructions)

Fuel		Type of Fuel	Heat Input (MMBTU/hr)
	a	n/a	
	b		
	c		

Notes

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	23	MM gal/yr
Maximum Operating Rate/Throughput		
Design Capacity/Volume	1.18	MM gal
Shell Height (ft)	22	feet
Tank Diameter (ft)	100	feet

☐ Fixed Roof ☐ Floating Roof ☑ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID): 11-78	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
Pollutant				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Total VOC (including those listed below)				0.10	0.10	0.46	0.46	U		ppm by vol
Benzene			00071-43-2	<0.01	<0.01	<0.01	<0.01	U		ppm by vol
Ethyl benzene			00100-41-4	<0.01	<0.01	<0.01	<0.01	U		ppm by vol
Toluene			00108-88-3	<0.01	<0.01	0.01	0.01	U		ppm by vol
Xylene (mixed isomers)			#N/A	0.01	0.01	0.03	0.03	U		ppm by vol

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Emissions Inventory Questionnaire (EIQ) for Air Pollutants
LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
12-78	Salt Dome Cavities (9) Piping and Brine Storage Resevoir (Clovelly Dome)	Method 27,"Unknown" Datum NAD27
Tempo Subject Item ID No.		UTM Zone 15 Horizontal 766300 mE Vertical 3263500 mN
EQT007		Latitude 29 ° 28 ' 21 " 54 hundredths
		Longitude 90 ° 15 ' 19 " 18 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
no	n/a ft ft^2	n/a ft	n/a ft/sec	n/a ft^3/min	n/a °F	8,760 hr/yr	constructed	25%	25%	25%	25%

Fuel	Type of Fuel Used and Heat Input (see instructions)	
	Type of Fuel	Heat Input (MMBTU/hr)
a	n/a	
b		
c		

Notes

Operating Parameters (include units)		
	Parameter	Description
Normal Operating Rate/Throughput	600	MM bbl/yr
Maximum Operating Rate/Throughput		
Design Capacity/Volume	1,806	MM gal
Shell Height (ft)		
Tank Diameter (ft)		

☐ Fixed Roof Floating Roof ☐ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID): 12-78	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
Pollutant				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Total VOC (including those listed below)				0.40	0.40	1.74	1.74	U		ppm by vol
Benzene			00071-43-2	<0.01	<0.01	0.01	0.01	U		ppm by vol
Cumene			00098-82-8	<0.01	<0.01	<0.01	<0.01	U		ppm by vol
Ethyl benzene			00100-41-4	<0.01	<0.01	0.01	0.01	U		ppm by vol
Toluene			00108-88-3	<0.01	<0.01	0.02	0.02	U		ppm by vol
Xylene (mixed isomers)			#N/A	0.01	0.01	0.02	0.02	U		ppm by vol
n-Hexane			00110-54-3	<0.01	<0.01	0.01	0.01	U		ppm by vol

State of Louisiana
Emissions Inventory Questionnaire (EIQ) for Air Pollutants
LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
13-78	Fourchon Booster Station No. 2 Fuel Tank No. 2 (Clovelly Dome)	Method 27,"Unknown" Datum NAD27
Tempo Subject Item ID No. EQT008		UTM Zone 15 Horizontal 774800 mE Vertical 3228300 mN
		Latitude 29 ° 9 ' 12 " 59 hundredths
		Longitude 90 ° 10 ' 30 " 23 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
no	n/a ft / ft²	n/a ft	n/a ft/sec	n/a ft^3/min	n/a °F	8,760 hr/yr	constructed	25%	25%	25%	25%

Type of Fuel Used and Heat Input (see instructions)

Fuel		Type of Fuel	Heat Input (MMBTU/hr)
	a	n/a	
	b		
	c		

Notes

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	23	MM gal/yr
Maximum Operating Rate/Throughput		
Design Capacity/Volume	1.18	MM gal
Shell Height (ft)	22	feet
Tank Diameter (ft)	100	feet

☐ Fixed Roof ☐ Floating Roof ☑ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID)	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
Pollutant				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
13-78										
Total VOC (including those listed below)				0.10	0.10	0.46	0.46	U		ppm by vol
Benzene			00071-43-2	<0.01	<0.01	<0.01	<0.01	U		ppm by vol
Ethyl benzene			00100-41-4	<0.01	<0.01	<0.01	<0.01	U		ppm by vol
Toluene			00108-88-3	<0.01	<0.01	0.01	0.01	U		ppm by vol
Xylene (mixed isomers)			#N/A	0.01	0.01	0.03	0.03	U		ppm by vol

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Emissions Inventory Questionnaire (EIQ) for Air Pollutants
LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
15-78	Fourchon Booster Station Standby Generator	Method 27,"Unknown" Datum NAD27
Tempo Subject Item ID No.		UTM Zone 15 Horizontal 774800 mE Vertical 3228300 mN
EQT009		Latitude 29 ° 9 ' 12 " 59 hundredths
		Longitude 90 ° 10 ' 30 " 23 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
yes	0.57 ft / ft²	16 ft	237.00 ft/sec	5,014 ft^3/min	850 °F	500 hr/yr	constructed	25%	25%	25%	25%

Type of Fuel Used and Heat Input (see instructions)

Fuel		Type of Fuel	Heat Input (MMBTU/hr)
	a	Diesel	5.6
	b		
	c		

Notes
Increased hours.

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	805	hp
Maximum Operating Rate/Throughput	805	hp
Design Capacity/Volume		
Shell Height (ft)		
Tank Diameter (ft)		

☐ Fixed Roof ☐ Floating Roof ☐ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID): 15-78	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
Pollutant				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Particulate matter (PM_{10})				0.56	0.56	0.14	0.07	C		gr/std ft^3
Sulfur dioxide				0.33	0.33	0.08	0.06	C		ppm by vol
Nitrogen oxides				19.32	19.32	4.83	0.94	C		ppm by vol
Carbon monoxide				4.43	4.43	1.11	0.20	C		ppm by vol
Total VOC (including those listed below)				0.57	0.57	0.14	0.07	C		ppm by vol
Benzene			00071-43-2	0.004	0.004	<0.01	n/a	A		ppm by vol

State of Louisiana
Emissions Inventory Questionnaire (EIQ) for Air Pollutants
LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
16-78	Small Boat Harbor Fire Pump	Method _____ Datum _____ UTM Zone _____ Horizontal _____ mE Vertical _____ mN Latitude _____ ° _____ ' _____ " _____ hundredths Longitude _____ ° _____ ' _____ " _____ hundredths
Tempo Subject Item ID No. EQT010		

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
yes	_____ ft _____ ft^2	_____ ft	_____ ft/sec	_____ ft^3/min	_____ °F	_____ hr/yr					

Fuel	Type of Fuel Used and Heat Input (see instructions)		
		Type of Fuel	Heat Input (MMBTU/hr)
	a		
	b		
	c		

Notes

Operating Parameters (include units)		
	Parameter	Description
Normal Operating Rate/Throughput		
Maximum Operating Rate/Throughput		
Design Capacity/Volume		
Shell Height (ft)		
Tank Diameter (ft)		

☐ Fixed Roof Floating Roof ☐ External ☐ Internal

Air Pollutant Specific Information

Pollutant	Emission Point ID No. (Alternate ID)	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
					Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Particulate matter (PM_{10})	16-78				0.00	0.00	0.00	0.02	D		gr/std ft^3
Sulfur dioxide					0.00	0.00	0.00	0.02	D		ppm by vol
Nitrogen oxides					0.00	0.00	0.00	0.35	D		ppm by vol
Carbon monoxide					0.00	0.00	0.00	0.08	D		ppm by vol
Total VOC (including those listed below)					0.00	0.00	0.00	0.03	D		ppm by vol

State of Louisiana
Emissions Inventory Questionnaire (EIQ) for Air Pollutants
LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
17-78	Clovelly Dome - Operations Center Standby Generator	Method 27,"Unknown" Datum NAD27
Tempo Subject Item ID No.		UTM Zone 15 Horizontal 766300 mE Vertical 3263500 mN
EQT011		Latitude 29 ° 28 ' 21 " 54 hundredths
		Longitude 90 ° 15 ' 13 " 93 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
yes	0.67 ft ft^2	18 ft	161.00 ft/sec	6,759 ft^3/min	865 °F	500 hr/yr	constructed	25%	25%	25%	25%

Type of Fuel Used and Heat Input (see instructions)

Fuel		Type of Fuel	Heat Input (MMBTU/hr)
	a	Diesel	4.7
	b		
	c		

Notes

Increased hours.

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	671	hp
Maximum Operating Rate/Throughput	671	hp
Design Capacity/Volume		
Shell Height (ft)		
Tank Diameter (ft)		

☐ Fixed Roof ☐ Floating Roof ☐ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID): 17-78	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
Pollutant				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Particulate matter (PM_{10})				0.47	0.47	0.12	0.05	C		gr/std ft^3
Sulfur dioxide				0.27	0.27	0.07	0.04	C		ppm by vol
Nitrogen oxides				16.10	16.10	4.03	0.64	C		ppm by vol
Carbon monoxide				3.69	3.69	0.92	0.14	C		ppm by vol
Total VOC (including those listed below)				0.47	0.47	0.12	0.05	C		ppm by vol
Benzene			00071-43-2	0.004	0.004	<0.01	n/a	A		ppm by vol

State of Louisiana

Emissions Inventory Questionnaire (EIQ) for Air Pollutants

LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
18-78	Clovelly Dome - Emergency Crude Transfer Pump	Method: 27,"Unknown" Datum: NAD27
Tempo Subject Item ID No.: EQT012		UTM Zone: 15 Horizontal: 766300 mE Vertical: 3263500 mN
		Latitude: 29 ° 27 ' 49 " 9 hundredths
		Longitude: 90 ° 15 ' 14 " 80 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
yes	0.6 ft / ft²	16 ft	225.00 ft/sec	5,300 ft^3/min	880 °F	500 hr/yr	constructed	25%	25%	25%	25%

Fuel — Type of Fuel Used and Heat Input (see instructions)

	Type of Fuel	Heat Input (MMBTU/hr)
a	Diesel	6.0
b		
c		

Notes

Increased hours

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	860	hp
Maximum Operating Rate/Throughput	860	hp
Design Capacity/Volume		
Shell Height (ft)		
Tank Diameter (ft)		

☐ Fixed Roof Floating Roof ☐ External ☐ Internal

Air Pollutant Specific Information

Pollutant	Emission Point ID No. (Alternate ID)	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
					Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Particulate matter (PM_{10})	18-78				0.60	0.60	0.15	0.27	C		gr/std ft^3
Sulfur dioxide					0.35	0.35	0.09	0.25	C		ppm by vol
Nitrogen oxides					20.64	20.64	5.16	3.83	C		ppm by vol
Carbon monoxide					4.73	4.73	1.18	0.82	C		ppm by vol
Total VOC (including those listed below)					0.61	0.61	0.15	0.30	C		ppm by vol
Acetaldehyde				00075-07-0	0.00	0.00	0.00	<0.01	D		ppm by vol
Benzene				00071-43-2	0.005	0.005	<0.01	<0.01	U		ppm by vol
Formaldehyde				00050-00-0	0.00	0.00	0.00	<0.01	D		ppm by vol

State of Louisiana
Emissions Inventory Questionnaire (EIQ) for Air Pollutants
LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
19-78	Clovelly Dome - Portable Diesel Generator	Method 27,"Unknown" Datum NAD27
Tempo Subject Item ID No.		UTM Zone 15 Horizontal 766300 mE Vertical 3263500 mN
EQT013		Latitude 29 ° 28 ' 21 " 54 hundredths
		Longitude 90 ° 15 ' 13 " 93 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
yes	0.33 ft	10 ft	n/a ft/sec	212 ft^3/min	1,100 °F	500 hr/yr	constructed	25%	25%	25%	25%
	ft^2										

Fuel

	Type of Fuel	Heat Input (MMBTU/hr)
a	Diesel	0.07
b		
c		

Notes

Increased hours.

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	10	hp
Maximum Operating Rate/Throughput	10	hp
Design Capacity/Volume		
Shell Height (ft)		
Tank Diameter (ft)		

☐ Fixed Roof ☐ Floating Roof ☐ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID): 19-78	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
Pollutant				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Particulate matter (PM_{10})				0.02	0.02	0.01	0.01	C		gr/std ft^3
Sulfur dioxide				0.02	0.02	0.01	0.01	C		ppm by vol
Nitrogen oxides				0.31	0.31	0.08	0.14	C		ppm by vol
Carbon monoxide				0.07	0.07	0.02	0.03	C		ppm by vol
Total VOC (including those listed below)				0.02	0.02	0.01	0.01	C		ppm by vol

State of Louisiana
Emissions Inventory Questionnaire (EIQ) for Air Pollutants
LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
20-78	Clovely Fire Pump	Method 27,"Unknown" Datum NAD27
Tempo Subject Item ID No.		UTM Zone 15 Horizontal 771500 mE Vertical 3223800 mN
EQT014		Latitude 29 ° 6 ' 49 " 12 hundredths
		Longitude 90 ° 12 ' 36 " 18 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
yes	0.42 ft / ft²	12 ft	238.00 ft/sec	1,943 ft^3/min	185 °F	500 hr/yr	constructed	25%	25%	25%	25%

Fuel		Type of Fuel Used and Heat Input (see instructions)	
		Type of Fuel	Heat Input (MMBTU/hr)
	a	Diesel	1.92
	b		
	c		

Notes
Increased hours.

Operating Parameters (include units)		
	Parameter	Description
Normal Operating Rate/Throughput	1.92	MMBTU/hr
Maximum Operating Rate/Throughput		
Design Capacity/Volume		
Shell Height (ft)		
Tank Diameter (ft)		

☐ Fixed Roof ☐ Floating Roof ☐ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID): 20-78	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
Pollutant				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Particulate matter (PM_{10})				0.59	0.59	0.15	0.01	C		gr/std ft^3
Sulfur dioxide				0.56	0.56	0.14	0.01	C		ppm by vol
Nitrogen oxides				8.46	8.46	2.11	0.08	C		ppm by vol
Carbon monoxide				1.82	1.82	0.46	0.02	C		ppm by vol
Total VOC (including those listed below)				0.67	0.67	0.17	0.01	C		ppm by vol
Formaldehyde			00050-00-0	0.002	0.002	<0.01	n/a	A		ppm by vol

State of Louisiana
Emissions Inventory Questionnaire (EIQ) for Air Pollutants
LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
21-78	Clovelly Dome - Standby Generator - Brine Storage Resevoir	Method 27,"Unknown" Datum NAD27
Tempo Subject Item ID No.		UTM Zone 15 Horizontal 766300 mE Vertical 3263500 mN
EQT015		Latitude 29 ° 28 ' 21 " 54 hundredths
		Longitude 90 ° 15 ' 13 " 93 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
yes	0.33 ft	10 ft	212.00 ft/sec	1,100 ft^3/min	1,100 °F	500 hr/yr	constructed	25%	25%	25%	25%
	ft^2										

Fuel — Type of Fuel Used and Heat Input (see instructions)

	Type of Fuel	Heat Input (MMBTU/hr)
a	Diesel	0.08
b		
c		

Notes
Increased hours.

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	108	hp
Maximum Operating Rate/Throughput	108	hp
Design Capacity/Volume		
Shell Height (ft)		
Tank Diameter (ft)		

☐ Fixed Roof Floating Roof ☐ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID): 21-78	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
Pollutant				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Particulate matter (PM_{10})				0.24	0.24	0.06	0.01	C		gr/std ft^3
Sulfur dioxide				0.22	0.22	0.06	0.01	C		ppm by vol
Nitrogen oxides				3.35	3.35	0.84	0.07	C		ppm by vol
Carbon monoxide				0.72	0.72	0.18	0.02	C		ppm by vol
Total VOC (including those listed below)				0.27	0.27	0.07	0.01	C		ppm by vol

State of Louisiana
Emissions Inventory Questionnaire (EIQ) for Air Pollutants
LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
23-88	Clovelly Dome - Tank 1 Operations Center	Method 27,"Unknown" Datum NAD27
Tempo Subject Item ID No.		UTM Zone 15 Horizontal 766300 mE Vertical 3263500 mN
EQT016		Latitude 29 ° 28 ' 21 " 54 hundredths
		Longitude 90 ° 15 ' 19 " 18 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
no	n/a ft / ft²	n/a ft	n/a ft/sec	n/a ft^3/min	n/a °F	8,760 hr/yr	constructed	25%	25%	25%	25%

Type of Fuel Used and Heat Input (see instructions)

Fuel		Type of Fuel	Heat Input (MMBTU/hr)
	a	n/a	
	b		
	c		

Notes

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	9000	gal/yr
Maximum Operating Rate/Throughput		
Design Capacity/Volume	1000	gal
Shell Height (ft)	11	feet
Tank Diameter (ft)	4	feet

☐ Fixed Roof Floating Roof ☐ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID): 23-88 / Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates: Average (lb/hr)	Proposed Emission Rates: Maximum (lbs/hr)	Proposed Emission Rates: Annual (tons/yr)	Permitted Emission Rate (Current): Annual (tons/yr)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
Total VOC (including those listed below)				0.06	0.06	0.27	0.27	U		ppm by vol
Benzene			00071-43-2	<0.01	<0.01	<0.01	<0.01	U		ppm by vol
Toluene			00108-88-3	<0.01	<0.01	<0.01	<0.01	U		ppm by vol
n-Hexane			00110-54-3	<0.01	<0.01	<0.01	<0.01	U		ppm by vol

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Emissions Inventory Questionnaire (EIQ) for Air Pollutants
LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
24-88	Clovelly Dome - Tank 2 Operations Center	Method 27,"Unknown" Datum NAD27
Tempo Subject Item ID No.		UTM Zone 15 Horizontal 766300 mE Vertical 3263500 mN
EQT017		Latitude 29 ° 28 ' 21 " 54 hundredths
		Longitude 90 ° 15 ' 19 " 18 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
no	n/a ft ft^2	n/a ft	n/a ft/sec	n/a ft^3/min	n/a °F	8,760 hr/yr	constructed	25%	25%	25%	25%

Fuel — Type of Fuel Used and Heat Input (see instructions)

	Type of Fuel	Heat Input (MMBTU/hr)
a	n/a	
b		
c		

Notes

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	9000	gal/yr
Maximum Operating Rate/Throughput		
Design Capacity/Volume	1000	gal
Shell Height (ft)	11	feet
Tank Diameter (ft)	4	feet

☐ Fixed Roof Floating Roof ☐ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID)	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
Pollutant				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
24-88										
Total VOC (including those listed below)				0.06	0.06	0.27	0.27	U		ppm by vol
Benzene			00071-43-2	<0.01	<0.01	<0.01	<0.01	U		ppm by vol
Toluene			00108-88-3	<0.01	<0.01	<0.01	<0.01	U		ppm by vol
n-Hexane			00110-54-3	<0.01	<0.01	<0.01	<0.01	U		ppm by vol

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Emissions Inventory Questionnaire (EIQ) for Air Pollutants
LOOP, LLC Port Complex - Lafourche Parish

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Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
38-91	Clovelly Dome -Operations Center Fire Pump	Method 27,"Unknown" Datum NAD27
Tempo Subject Item ID No.		UTM Zone 15 Horizontal 766300 mE Vertical 3263500 mN
EQT019		Latitude 29 ° 28 ' 21 " 54 hundredths
		Longitude 90 ° 15 ' 19 " 18 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
yes	0.21 ft	6 ft	386.00 ft/sec	790 ft^3/min	820 °F	500 hr/yr	constructed	25%	25%	25%	25%
	ft^2										

Fuel

	Type of Fuel	Heat Input (MMBTU/hr)
a	Diesel	3.5
b		
c		

Notes
Increased hours.

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	500	hp
Maximum Operating Rate/Throughput	500	hp
Design Capacity/Volume		
Shell Height (ft)		
Tank Diameter (ft)		

☐ Fixed Roof Floating Roof ☐ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID)	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
Pollutant				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
38-91										
Particulate matter (PM_{10})				1.10	1.10	0.28	0.02	C		gr/std ft^3
Sulfur dioxide				1.03	1.03	0.26	0.02	C		ppm by vol
Nitrogen oxides				15.50	15.50	3.88	0.34	C		ppm by vol
Carbon monoxide				3.34	3.34	0.84	0.07	C		ppm by vol
Total VOC (including those listed below)				1.24	1.24	0.31	0.03	C		ppm by vol
Acetaldehyde			00075-07-0	0.003	0.003	<0.01	n/a	A		ppm by vol
Benzene			00071-43-2	0.003	0.003	<0.01	n/a	A		ppm by vol
Formaldehyde			00050-00-0	0.004	0.004	<0.01	n/a	A		ppm by vol

State of Louisiana
Emissions Inventory Questionnaire (EIQ) for Air Pollutants
LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
35-88	Clovelly Dome - Fire School Pump	Method: 27,"Unknown" Datum: NAD27
Tempo Subject Item ID No.: EQT018		UTM Zone: 15 Horizontal: 766300 mE Vertical: 3263500 mN
		Latitude: 29 ° 28 ' 21 " 54 hundredths
		Longitude: 90 ° 15 ' 19 " 18 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
yes	0.21 ft / ft²	6 ft	386.00 ft/sec	790 ft^3/min	820 °F	500 hr/yr	constructed	25%	25%	25%	25%

Fuel	Type of Fuel Used and Heat Input (see instructions)		
		Type of Fuel	Heat Input (MMBTU/hr)
	a	Diesel	2.8
	b		
	c		

Notes

Increased hours.

Operating Parameters (include units)		
	Parameter	Description
Normal Operating Rate/Throughput	400	hp
Maximum Operating Rate/Throughput	400	hp
Design Capacity/Volume		
Shell Height (ft)		
Tank Diameter (ft)		

☐ Fixed Roof ☐ Floating Roof ☐ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID): 35-88 / Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Particulate matter (PM_{10})				0.88	0.88	0.22	0.01	C		gr/std ft^3
Sulfur dioxide				0.82	0.82	0.21	0.01	C		ppm by vol
Nitrogen oxides				12.40	12.40	3.10	0.15	C		ppm by vol
Carbon monoxide				2.67	2.67	0.67	0.03	C		ppm by vol
Total VOC (including those listed below)				0.99	0.99	0.25	0.01	C		ppm by vol
Acetaldehyde			00075-07-0	0.002	0.002	<0.01	n/a	A		ppm by vol
Benzene			00071-43-2	0.003	0.003	<0.01	n/a	A		ppm by vol
Formaldehyde			00050-00-0	0.003	0.003	<0.01	n/a	A		ppm by vol

State of Louisiana
Emissions Inventory Questionnaire (EIQ) for Air Pollutants
LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
5-99	Clovelly Dome - Crude Oil Tankfarm Firewater Pump	Method 27,"Unknown" Datum NAD27
Tempo Subject Item ID No.		UTM Zone 15 Horizontal 764302 mE Vertical 3261267 mN
EQT020		Latitude 29 ° 27 ' 10 " 60 hundredths
		Longitude 90 ° 16 ' 29 " 97 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
yes	0.67 ft / ft²	6 ft	250.00 ft/sec	5,400 ft^3/min	730 °F	500 hr/yr	constructed	25%	25%	25%	25%

Type of Fuel Used and Heat Input (see instructions)

Fuel		Type of Fuel	Heat Input (MMBTU/hr)
	a	Diesel	7.7
	b		
	c		

Notes

Increased hours.

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	1100	hp
Maximum Operating Rate/Throughput	1100	hp
Design Capacity/Volume		
Shell Height (ft)		
Tank Diameter (ft)		

☐ Fixed Roof Floating Roof ☐ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID)	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
Pollutant				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Particulate matter (PM_{10})				0.18	0.18	0.05	0.02	C		gr/std ft^3
Sulfur dioxide				0.44	0.44	0.11	0.19	C		ppm by vol
Nitrogen oxides				28.92	28.92	7.23	0.69	C		ppm by vol
Carbon monoxide				1.34	1.34	0.34	0.16	C		ppm by vol
Total VOC (including those listed below)				0.45	0.45	0.11	0.02	C		ppm by vol
Benzene			00071-43-2	0.006	0.006	<0.01	n/a	A		ppm by vol
Toluene			00108-88-3	0.002	0.002	<0.01	n/a	A		ppm by vol

State of Louisiana

Emissions Inventory Questionnaire (EIQ) for Air Pollutants

LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
1-07	470 bhp Emergency Generator (Small Boat Harbor)	Method: 27,"Unknown" Datum: NAD27
Tempo Subject Item ID No.		UTM Zone: 15 Horizontal: 764302 mE Vertical: 3261267 mN
EQT021		Latitude: 29 ° 27 ' 10 " 60 hundredths
		Longitude: 90 ° 16 ' 29 " 97 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
yes	0.5 ft ft^2	9.38 ft	307.70 ft/sec	3,625 ft^3/min	901 °F	500 hr/yr	Jul | 2006 constructed	25%	25%	25%	25%

Type of Fuel Used and Heat Input (see instructions)

Fuel		Type of Fuel	Heat Input (MMBTU/hr)
	a	Diesel	3.3
	b		
	c		

Notes

Increased hours.

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	470	bhp
Maximum Operating Rate/Throughput	470	bhp
Design Capacity/Volume		
Shell Height (ft)		
Tank Diameter (ft)		

☐ Fixed Roof Floating Roof ☐ External ☐ Internal

Air Pollutant Specific Information

Pollutant	Emission Point ID No. (Alternate ID)	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
					Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Particulate matter (PM_{10})	1-07				1.03	1.03	0.26	<0.01	C		gr/std ft^3
Sulfur dioxide					0.96	0.96	0.24	0.01	C		ppm by vol
Nitrogen oxides					14.57	14.57	3.64	0.04	C		ppm by vol
Carbon monoxide					3.14	3.14	0.78	0.01	C		ppm by vol
Total VOC (including those listed below)					1.16	1.16	0.29	<0.01	C		ppm by vol
Acetaldehyde				00075-07-0	0.003	0.003	<0.01	n/a	A		ppm by vol
Benzene				00071-43-2	0.003	0.003	<0.01	n/a	A		ppm by vol
Formaldehyde				00050-00-0	0.004	0.004	<0.01	n/a	A		ppm by vol

State of Louisiana
Emissions Inventory Questionnaire (EIQ) for Air Pollutants
LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
2-07	470 bhp Emergency Generator (Tank Facility)	Method: 27,"Unknown" Datum: NAD27
Tempo Subject Item ID No.: EQT022		UTM Zone: 15 Horizontal: 764302 mE Vertical: 3261267 mN
		Latitude: 29 ° 27 ' 10 " 60 hundredths
		Longitude: 90 ° 16 ' 29 " 97 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
yes	0.5 ft / ft²	9.38 ft	307.70 ft/sec	3,625 ft^3/min	901 °F	500 hr/yr	Jul 2006 constructed	25%	25%	25%	25%

Fuel

	Type of Fuel	Heat Input (MMBTU/hr)
a	Diesel	3.3
b		
c		

Notes
Increased hours.

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	470	bhp
Maximum Operating Rate/Throughput	470	bhp
Design Capacity/Volume		
Shell Height (ft)		
Tank Diameter (ft)		

☐ Fixed Roof ☐ Floating Roof ☐ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID): 2-07 / Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Particulate matter (PM_{10})				1.03	1.03	0.26	<0.01	C		gr/std ft^3
Sulfur dioxide				0.96	0.96	0.24	0.01	C		ppm by vol
Nitrogen oxides				14.57	14.57	3.64	0.04	C		ppm by vol
Carbon monoxide				3.14	3.14	0.78	0.01	C		ppm by vol
Total VOC (including those listed below)				1.16	1.16	0.29	<0.01	C		ppm by vol
Acetaldehyde			00075-07-0	0.003	0.003	<0.01	n/a	A		ppm by vol
Benzene			00071-43-2	0.003	0.003	<0.01	n/a	A		ppm by vol
Formaldehyde			00050-00-0	0.004	0.004	<0.01	n/a	A		ppm by vol

State of Louisiana
Emissions Inventory Questionnaire (EIQ) for Air Pollutants
LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
3-07	671 bhp Emergency Generator (Clovelly Dome)	Method 27,"Unknown" Datum NAD27
Tempo Subject Item ID No.		UTM Zone 15 Horizontal 764302 mE Vertical 3261267 mN
EQT023		Latitude 29 ° 27 ' 10 " 60 hundredths
		Longitude 90 ° 16 ' 29 " 97 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
yes	0.5 ft	9.83 ft	220.69 ft/sec	2,600 ft^3/min	810 °F	500 hr/yr	Nov | 2005	25%	25%	25%	25%
	ft^2						constructed				

Type of Fuel Used and Heat Input (see instructions)

Fuel		Type of Fuel	Heat Input (MMBTU/hr)
	a	Diesel	4.7
	b		
	c		

Notes

Increased hours.

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	671	bhp
Maximum Operating Rate/Throughput	671	bhp
Design Capacity/Volume		
Shell Height (ft)		
Tank Diameter (ft)		

☐ Fixed Roof ☐ Floating Roof ☐ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID) / Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
3-07										
Particulate matter (PM_{10})				0.47	0.47	0.12	<0.01	C		gr/std ft^3
Sulfur dioxide				0.27	0.27	0.07	0.01	C		ppm by vol
Nitrogen oxides				16.10	16.10	4.03	0.04	C		ppm by vol
Carbon monoxide				3.69	3.69	0.92	0.01	C		ppm by vol
Total VOC (including those listed below)				0.47	0.47	0.12	<0.01	C		ppm by vol
Benzene			00071-43-2	0.004	0.004	<0.01	n/a	A		ppm by vol

State of Louisiana
Emissions Inventory Questionnaire (EIQ) for Air Pollutants
LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
4-07	671 bhp Emergency Generator (Clovelly Control Room)	Method: 27,"Unknown" Datum: NAD27
Tempo Subject Item ID No.: EQT024		UTM Zone: 15 Horizontal: 764302 mE Vertical: 3261267 mN
		Latitude: 29 ° 27 ' 10 " 60 hundredths
		Longitude: 90 ° 16 ' 29 " 97 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
yes	0.5 ft	9.83 ft	220.69 ft/sec	2,600 ft^3/min	810 °F	500 hr/yr	Nov | 2005	25%	25%	25%	25%
	ft^2						constructed				

Type of Fuel Used and Heat Input (see instructions)

Fuel		Type of Fuel	Heat Input (MMBTU/hr)
	a	Diesel	4.7
	b		
	c		

Notes

Increased hours.

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	671	bhp
Maximum Operating Rate/Throughput	671	bhp
Design Capacity/Volume		
Shell Height (ft)		
Tank Diameter (ft)		

☐ Fixed Roof Floating Roof ☐ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID): 4-07	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
Pollutant				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Particulate matter (PM_{10})				0.47	0.47	0.12	<0.01	C		gr/std ft^3
Sulfur dioxide				0.27	0.27	0.07	0.01	C		ppm by vol
Nitrogen oxides				16.10	16.10	4.03	0.04	C		ppm by vol
Carbon monoxide				3.69	3.69	0.92	0.01	C		ppm by vol
Total VOC (including those listed below)				0.47	0.47	0.12	<0.01	C		ppm by vol
Benzene			00071-43-2	0.004	0.004	<0.01	n/a	A		ppm by vol

State of Louisiana
Emissions Inventory Questionnaire (EIQ) for Air Pollutants
LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
5-07	268 bhp Emergency Generator (OC Warehouse)	Method 27,"Unknown" Datum NAD27
Tempo Subject Item ID No.		UTM Zone 15 Horizontal 764302 mE Vertical 3261267 mN
EQT025		Latitude 29 ° 27 ' 10 " 60 hundredths
		Longitude 90 ° 16 ' 29 " 97 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
yes	0.42 ft / ft²	10.25 ft	135.94 ft/sec	1,130 ft^3/min	1,056 °F	500 hr/yr	May 2006 constructed	25%	25%	25%	25%

Type of Fuel Used and Heat Input (see instructions)

Fuel		Type of Fuel	Heat Input (MMBTU/hr)
	a	Diesel	1.9
	b		
	c		

Notes
Increased hours.

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	268	bhp
Maximum Operating Rate/Throughput	268	bhp
Design Capacity/Volume		
Shell Height (ft)		
Tank Diameter (ft)		

☐ Fixed Roof ☐ Floating Roof ☐ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID)	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
Pollutant				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
5-07										
Particulate matter (PM_{10})				0.59	0.59	0.15	<0.01	C		gr/std ft^3
Sulfur dioxide				0.55	0.55	0.14	<0.01	C		ppm by vol
Nitrogen oxides				8.31	8.31	2.08	0.03	C		ppm by vol
Carbon monoxide				1.79	1.79	0.45	0.01	C		ppm by vol
Total VOC (including those listed below)				0.66	0.66	0.17	<0.01	C		ppm by vol
Formaldehyde			00050-00-0	0.002	0.002	<0.01	n/a	A		ppm by vol

State of Louisiana
Emissions Inventory Questionnaire (EIQ) for Air Pollutants
LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec | 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
6-07	168 bhp Emergency Generator (LOCAP)	Method 27,"Unknown" Datum NAD27
Tempo Subject Item ID No. EQT026		UTM Zone 15 Horizontal 764302 mE Vertical 3261267 mN
		Latitude 29 ° 27 ' 10 " 60 hundredths
		Longitude 90 ° 16 ' 29 " 97 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
yes	0.25 ft / ft²	10.58 ft	304.90 ft/sec	898 ft^3/min	950 °F	500 hr/yr	May 2006 constructed	25%	25%	25%	25%

Fuel — Type of Fuel Used and Heat Input (see instructions)

	Type of Fuel	Heat Input (MMBTU/hr)
a	Diesel	1.1
b		
c		

Notes
Increased hours.

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	168	bhp
Maximum Operating Rate/Throughput	168	bhp
Design Capacity/Volume		
Shell Height (ft)		
Tank Diameter (ft)		

☐ Fixed Roof Floating Roof ☐ External ☐ Internal

Air Pollutant Specific Information

Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates: Average (lb/hr)	Proposed Emission Rates: Maximum (lbs/hr)	Proposed Emission Rates: Annual (tons/yr)	Permitted Emission Rate (Current) Annual (tons/yr)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
Particulate matter (PM_{10})				0.37	0.37	0.09	<0.01	C		gr/std ft^3
Sulfur dioxide				0.34	0.34	0.09	<0.01	C		ppm by vol
Nitrogen oxides				5.21	5.21	1.30	0.01	C		ppm by vol
Carbon monoxide				1.12	1.12	0.28	<0.01	C		ppm by vol
Total VOC (including those listed below)				0.41	0.41	0.10	<0.01	C		ppm by vol

State of Louisiana
Emissions Inventory Questionnaire (EIQ) for Air Pollutants
LOOP, LLC Port Complex - Lafourche Parish

Date of submittal: Dec 2010

Emission Point ID No. (Alternate ID)	Descriptive Name of the Emissions Source (Alt. Name)	Approximate Location of Stack or Vent (see instructions)
10-78	Fugitive Emissions (Clovelly Dome)	Method 27,"Unknown" Datum NAD27
Tempo Subject Item ID No.		UTM Zone 15 Horizontal 766300 mE Vertical 3263500 mN
FUG001		Latitude 29 ° 58 ' 21 " 54 hundredths
		Longitude 90 ° 15 ' 13 " 93 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours per year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
no	n/a ft ft²	n/a ft	n/a ft/sec	n/a ft^3/min	n/a °F	8,760 hr/yr		25%	25%	25%	25%

Type of Fuel Used and Heat Input (see instructions)

Fuel		Type of Fuel	Heat Input (MMBTU/hr)
	a		
	b		
	c		

Notes

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput		
Maximum Operating Rate/Throughput		
Design Capacity/Volume		
Shell Height (ft)		
Tank Diameter (ft)		

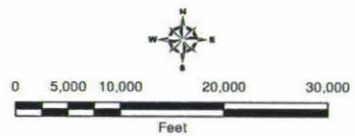
☐ Fixed Roof Floating Roof ☐ External ☐ Internal

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID)	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
Pollutant				Average (lb/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Total VOC (including those listed below)				<0.01	<0.01	<0.01	<0.01	U		ppm by vol

FIGURE 1

SITE LOCATION MAP



Legend

- PARISH BOUNDARY
- FACILITY LOCATION

LOOP LLC
GALLIANO/LEEVILLE, LOUISIANA
LOOP LLC PORT COMPLEX

SITE LOCATION MAP

LAFOURCHE PARISH

C-K ASSOCIATES, LLC
ENVIRONMENTAL & ENGINEERING CONSULTANTS

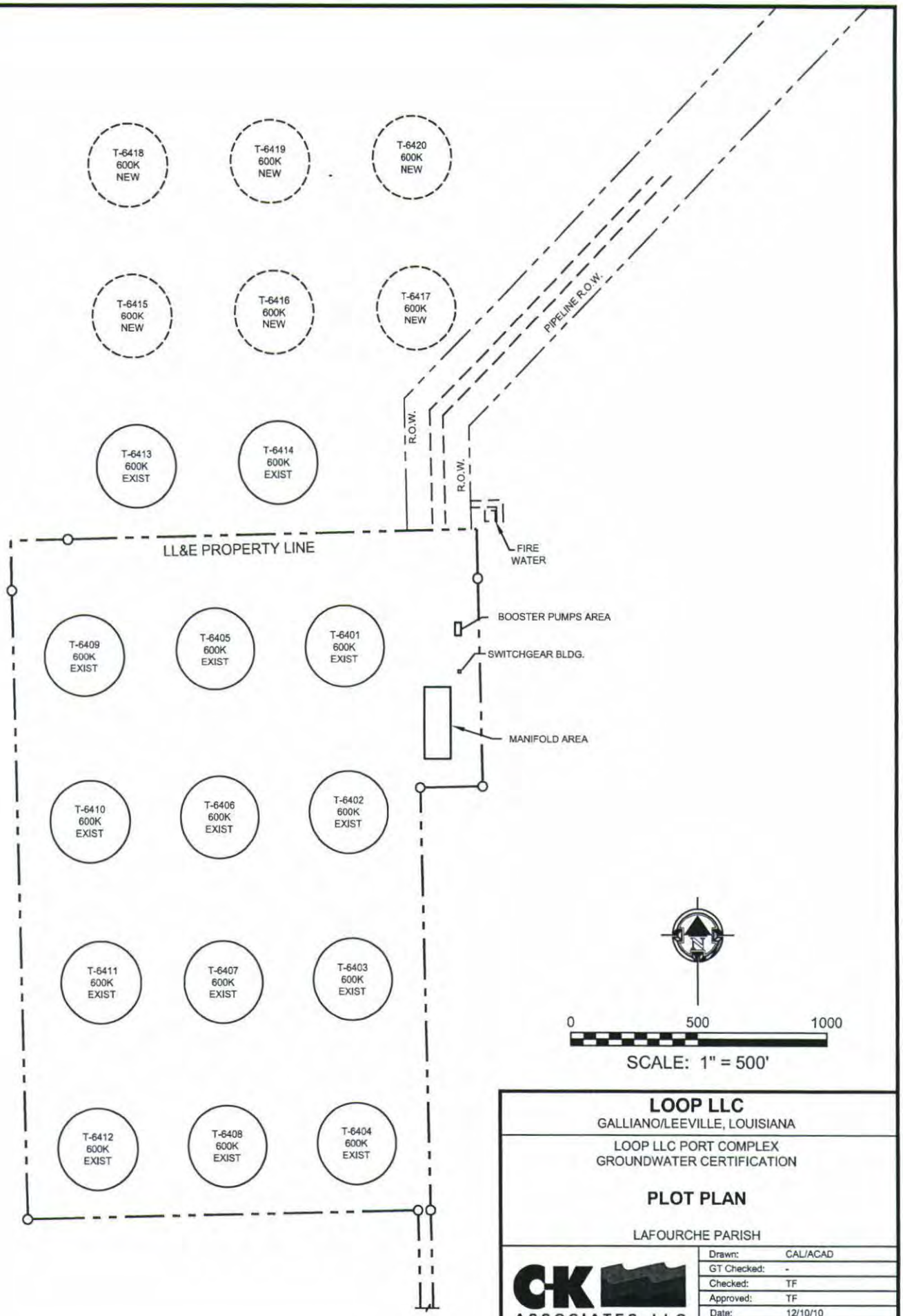
Drawn:	ABL/AV9.2
Checked:	TF
Approved:	ME
Date:	02/27/07
Dwg. No.:	B2779A-01

FIGURE 1

B2779A-01 - FACILITY MAP.mxd

FIGURE 2

PLOT PLAN



LOOP LLC

GALLIANO/LEEVILLE, LOUISIANA

LOOP LLC PORT COMPLEX
GROUNDWATER CERTIFICATION

PLOT PLAN

LAFOURCHE PARISH

CK ASSOCIATES, LLC
ENVIRONMENTAL & ENGINEERING CONSULTANTS

Drawn:	CAL/ACAD
GT Checked:	-
Checked:	TF
Approved:	TF
Date:	12/10/10
Dwg. No.:	A5510A-03

FIGURE 2

APPENDIX A

STATE OPERATING PERMIT 1560-00027-03

DEPARTMENT OF ENVIRONMENTAL QUALITY

KATHLEEN BABINEAUX BLANCO
GOVERNOR

MIKE D McDANIEL, Ph D
SECRETARY

Certified Mail No.:

Activity No : PER20070001
Agency Interest No.: 4634

Mrs. CaSandra J. Cooper-Gates
Director, Human, Environmental and Safety Services
LOOP LLC
Post Office Box 7250
Metairie, Louisiana 70010-7250

RE: Permit Modification, LOOP LLC - Port Complex, LOOP LLC
Galliano, Lafourche Parish, Louisiana

Dear Mrs. Cooper-Gates:

This is to inform you that the permit modification request for the above referenced facility has been approved under LAC 33:III.501 The submittal was approved on the basis of the emissions reported and the approval in no way guarantees the design scheme presented will be capable of controlling the emissions as to the types and quantities stated. A new application must be submitted if the reported emissions are exceeded after operations begin. The synopsis, data sheets, and conditions are attached herewith.

It will be considered a violation of the permit if all proposed control measures and/or equipment are not installed and properly operated and maintained as specified in the application.

Also enclosed is a document entitled "General Information." Please be advised that this document contains a summary of facility-level information contained in LDEQ's TEMPO database and is not considered a part of the permit. Please review the information contained in this document for accuracy and completeness. If any changes are required or if you have questions regarding this document, you may contact Mr. David Ferrand, Environmental Assistance Division, at (225) 219-3247 or email your changes to facupdate@la.gov.

The permit number cited below and agency interest number cited above should be referenced in future correspondence regarding this facility.

Done this 12th day of June, 2007.

Permit No.: 1560-00027-03

Sincerely,

Chuck Carr Brown, Ph.D.
Assistant Secretary

CCB:sbp

ENVIRONMENTAL **SERVICES**
: PO BOX 4313, BATON ROUGE, LA 70821-4313
P:225-219-3181 F:225-219-3309
WWW.DEQ.LOUISIANA.GOV

AIR PERMIT BRIEFING SHEET
AIR PERMITS DIVISION
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

LOOP LLC - Port Complex
Agency Interest No.: 4634
LOOP LLC
Galliano, Lafourche Parish, Louisiana

I. BACKGROUND

LOOP LLC - Port Complex consists of pipeline terminal facilities existing in Galliano and Leeville located in Lafourche Parish. The LOOP LLC - Port Complex currently operates under Permit No. 1560-00027-02, issued February 5, 2003

II. ORIGIN

A permit application and Emission Inventory Questionnaire (EIQ) dated April 4, 2007, were received requesting a permit modification.

III. DESCRIPTION

The LOOP LLC – Port Complex consists of the Clovelly Dome Storage Terminal in Galliano, the Small Boat Harbor in Leeville, the Fourchon Booster Station in Leeville, and the Marine Offloading Terminal in Grand Isle Block 59 of the Gulf of Mexico. The Clovelly Dome Storage Terminal consists of nine underground storage caverns. These caverns provide storage for crude oil prior to pipeline delivery. Eight of the caverns have a capacity of approximately 6 MM barrels of oil, and one cavern has a capacity of 3 MM barrels of oil. The terminal also consist of surface facilities located in the same general vicinity which include a Brine Storage Reservoir, Operations Building, crude oil storage tanks, fuel and slop oil tanks, a turbine generator, and ancillary equipment. The Small Boat Harbor, which is located on Bayou Lafourche, shelters crew and work boats and includes hose testing facilities. The Fourchon Booster Station is a secured unmanned facility with two large diesel storage tanks and a few small storage tanks. Emission control systems utilized at the LOOP Complex facilities include the latest storage tank technology, mechanical seals on pumps, and low sulfur fuel oil.

LOOP LLC proposes to expand its Clovelly Dome Storage Terminal to include eight (8) additional crude oil storage tanks (Emission Point Nos. 8-07 through 15-07). Construction will be done in two phases with four (4) tanks constructed under each phase. The new tanks will be modeled after the six (6) existing tanks, each being an external floating roof tank and having a diameter of 310 feet. The volume of each of the new tanks will also be the same as the existing tanks, 600,000 barrels (bbl). With the additional tankage, it is expected that the previously permitted crude oil throughput of 60,000 bbl/day per tank will change to approximately 45,000 bbl/day per tank. However, the facility is requesting to remove the existing Consolidated Crude Oil Throughput operating scenario, and instead place all 14 crude oil tanks under one emissions CAP consisting of both operating and roof landing emissions based on a total facility-wide annual crude oil throughput of 230 million bbl of crude oil per year, which is an increase of the previously permitted throughput of 131.4 million bbl/yr. The emissions CAP will allow the facility to operate

the crude oil storage tanks with the flexibility to increase throughput through any one tank to meet scheduling and production needs. The CAP will also allow for roof landings to occur, when necessary. In addition, LOOP LLC is permitting six (6) diesel-fired emergency generators (Emission Point Nos. 1-07 through 6-07) which vary in size, as well as updating emission rates for existing sources based on evaluated operational parameters, emission calculation methodology, and speciation profiles.

Estimated emissions from this facility in tons per year are as follows:

Pollutant	Before	After	Change
PM_{10}	2.84	1.05	- 1.79
SO_2	29.18	22.56	- 6.62
NO_X	36.45	45.56	+ 9.11
CO	2.22	1.76	- 0.46
VOC [1]	43.24	93.82	+ 50.58

[1]VOC speciation in tons per year:

LAC 33:III. Chapter 51 Toxic Air Pollutants TAP's	Emissions
Acetaldehyde	0.001
Benzene	0.924
Cumene	0.023
Ethyl benzene	0.124
Formaldehyde	0.001
n-Hexane	0.948
Toluene	0.590
Xylenes	0.447
Total TAP's	3.057
Other VOC's	90.763
Total VOC	93.820

AIR PERMIT BRIEFING SHEET
AIR PERMITS DIVISION
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

LOOP LLC - Port Complex
Agency Interest No.: 4634
LOOP LLC
Galliano, Lafourche Parish, Louisiana

IV. TYPE OF REVIEW

This permit was reviewed for compliance with Louisiana Air Quality Regulations and New Source Performance Standards (NSPS) Prevention of Significant Deterioration (PSD) and National Emission Standards for Hazardous Air Pollutants (NESHAP) do not apply.

This facility is a minor source of LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs).

V. PUBLIC NOTICE

A notice requesting public comment on the permit was published in *The Advocate*, Baton Rouge, on May 9, 2007; and in the Lafourche Gazette, Larose, on May 9, 2007. A copy of the public notice was mailed to concerned citizens listed in the Office of Environmental Services Public Notice Mailing List on May 8, 2007 No comments were received.

VI. EFFECTS ON AMBIENT AIR

Dispersion Model(s) Used: None

VII. GENERAL CONDITION XVII ACTIVITIES

		Emission Rates - tons				
Work Activity	Schedule	PM_{10}	SO_2	NO_X	CO	VOC
None Specified						

AIR PERMIT BRIEFING SHEET
AIR PERMITS DIVISION
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

LOOP LLC - Port Complex
Agency Interest No.: 4634
LOOP LLC
Galliano, Lafourche Parish, Louisiana

VIII. INSIGNIFICANT ACTIVITIES

ID	Description	Citation
2-78	Diesel Fuel Tank for Turbine Generator (Clovelly Dome), 8,200 gallons	LAC 33:III.501.B.5.A.3
22-78	Diesel Fuel Tank for Emergency Crude Pump (Clovelly Dome), 8,200 gallons	LAC 33:III.501.B.5.A.3
25-88	Tank 3 – Operations Center – Diesel Tank (Clovelly Dome), 4,000 gallons	LAC 33:III.501.B.5.A.3
26-88	Tank 4 – Operations Center – Diesel Tank (Clovelly Dome), 4,000 gallons	LAC 33:III.501.B.5.A.3
27-88	Tank 5 – Fourchon Booster Station Diesel Tank, 1,000 gallons	LAC 33:III.501.B.5.A.3
28-88	Tank 6 – Fourchon Booster Station Emergency Generator Diesel Tank (Clovelly Dome), 322 gallons	LAC 33:III.501.B.5.A.3
29-88	Tank 7 – Fourchon Booster Station Dock Diesel Tank, 560 gallons	LAC 33:III.501.B.5.A.3
30-88	Tank 8 – Clovelly Day Tank for Fire Pumps, 80 gallons	LAC 33:III.501.B.5.A.2
31-88	Tank 9 – Clovelly Day Tank for Generators, 115 gallons	LAC 33:III.501.B.5.A.2
32-88	Tank 10 – Clovelly Underground Slop Oil Tank by Lab, 2,000 gallons	LAC 33:III.501.B.5.A.3
34-88	Tank 12 – Small Boat Harbor Diesel Tank, 260 gallons	LAC 33:III.501.B.5.A.3
36-89	Day Tank for Operations Center Standby Generator (Clovelly Dome), 94 gallons	LAC 33:III.501.B.5.A.2
37-91	Small Boat Harbor Diesel Tank, 564 gallons	LAC 33:III.501.B.5.A.3

LOUISIANA AIR EMISSION PERMIT
GENERAL CONDITIONS

I. This permit is issued on the basis of the emissions reported in the application for approval of emissions and in no way guarantees that the design scheme presented will be capable of controlling the emissions to the type and quantities stated. Failure to install, properly operate and/or maintain all proposed control measures and/or equipment as specified in the application and supplemental information shall be considered a violation of the permit and LAC 33:III.501. If the emissions are determined to be greater than those allowed by the permit (e.g. during the shakedown period for new or modified equipment) or if proposed control measures and/or equipment are not installed or do not perform according to design efficiency, an application to modify the permit must be submitted. All terms and conditions of this permit shall remain in effect unless and until revised by the permitting authority.

II. The permittee is subject to all applicable provisions of the Louisiana Air Quality Regulations. Violation of the terms and conditions of the permit constitutes a violation of these regulations.

III. The Emission Rates for Criteria Pollutants, Emission Rates for TAP/HAP & Other Pollutants, and Specific Requirements sections or, where included, Emission Inventory Questionnaire sheets establish the emission limitations and are a part of the permit. Any operating limitations are noted in the Specific Requirements or, where included, Tables 2 and 3 of the permit. The synopsis is based on the application and Emission Inventory Questionnaire dated April 4, 2007.

IV. This permit shall become invalid, for the sources not constructed, if:

A. Construction is not commenced, or binding agreements or contractual obligations to undertake a program of construction of the project are not entered into, within two (2) years (18 months for PSD permits) after issuance of this permit, or;

B. If construction is discontinued for a period of two (2) years (18 months for PSD permits) or more.

The administrative authority may extend this time period upon a satisfactory showing that an extension is justified.

This provision does not apply to the time period between construction of the approved phases of a phased construction project. However, each phase must commence construction within two (2) years (18 months for PSD permits) of its projected and approved commencement date.

V. The permittee shall submit semiannual reports of progress outlining the status of construction, noting any design changes, modifications or alterations in the construction schedule which have or may have an effect on the emission rates or ambient air quality levels. These reports shall continue to be submitted until such time as construction is certified as being complete. Furthermore, for any significant change in the design, prior approval shall be obtained from the Office of Environmental Services, Air Permits Division.

VI. The permittee shall notify the Department of Environmental Quality, Office of Environmental Services, Air Permits Division within ten (10) calendar days from the date that construction is certified as complete and the estimated date of start-up of operation. The appropriate Regional Office shall also be so notified within the same time frame.

VII. Any emissions testing performed for purposes of demonstrating compliance with the limitations set forth in paragraph III shall be conducted in accordance with the methods described in the Specific Conditions and, where included, Tables 1, 2, 3, 4, and 5 of this permit. Any deviation from or modification of the methods used for testing shall have prior approval from the Office of Environmental Assessment, Air Quality Assessment Division.

VIII. The emission testing described in paragraph VII above, or established in the specific conditions of this permit, shall be conducted within sixty (60) days after achieving normal production rate or after the end of the shakedown period, but in no event later than 180 days after initial start-up (or restart-up after modification). The Office of Environmental Assessment, Air Quality Assessment Division shall be notified at least (30) days prior to testing and shall be given the opportunity to conduct a pretest meeting and observe the emission testing. The test results shall be submitted to the Air Quality Assessment Division within sixty (60) days after the complete testing. As required by LAC 33:III 913, the permittee shall provide necessary sampling ports in stacks or ducts and such other safe and proper sampling and testing facilities for proper determination of the emission limits.

IX. The permittee shall, within 180 days after start-up and shakedown of each project or unit, report to the Office of Environmental Compliance, Enforcement Division any significant difference in operating emission rates as compared to those limitations specified in paragraph III. This report shall also include, but not be limited to, malfunctions and upsets. A permit modification shall be submitted, if necessary, as required in Condition I.

X. The permittee shall retain records of all information resulting from monitoring activities and information indicating operating parameters as specified in the specific conditions of this permit for a minimum of at least five (5) years.

XI. If for any reason the permittee does not comply with, or will not be able to comply with, the emission limitations specified in this permit, the permittee shall provide the Office of Environmental Compliance, Enforcement Division with a written report as specified below.

A. A written report shall be submitted within 7 days of any emission in excess of permit requirements by an amount greater than the Reportable Quantity established for that pollutant in LAC 33 I.Chapter 39.

B. A written report shall be submitted within 7 days of the initial occurrence of any emission in excess of permit requirements, regardless of the amount, where such emission occurs over a period of seven days or longer.

C. A written report shall be submitted quarterly to address all emission limitation exceedances not included in paragraphs A or B above. The schedule for submittal of quarterly reports shall be no later than the dates specified below for any emission limitation exceedances occurring during the corresponding specified calendar quarter:

1. Report by June 30 to cover January through March
2. Report by September 30 to cover April through June
3. Report by December 31 to cover July through September
4. Report by March 31 to cover October through December

D. Each report submitted in accordance with this condition shall contain the following information:

1. Description of noncomplying emission(s);
2. Cause of noncompliance;
3. Anticipated time the noncompliance is expected to continue, or if corrected, the duration of the period of noncompliance;
4. Steps taken by the permittee to reduce and eliminate the noncomplying emissions; and
5. Steps taken by the permittee to prevent recurrences of the noncomplying emissions.

E. Any written report submitted in advance of the timeframes specified above, in accordance with an applicable regulation, may serve to meet the reporting requirements of this condition provided all information specified above is included. For Part 70 sources, reports submitted in accordance with Part 70 General Condition R shall serve to meet the requirements of this condition provided all specified information is included. Reporting under this condition does not relieve the permittee from the reporting requirements of any applicable regulation, including LAC 33.I.Chapter 39, LAC 33.III.Chapter 9, and LAC 33.III.5107.

XII. Permittee shall allow the authorized officers and employees of the Department of Environmental Quality, at all reasonable times and upon presentation of identification, to:

A Enter upon the permittee's premises where regulated facilities are located, regulated activities are conducted or where records required under this permit are kept;

B Have access to and copy any records that are required to be kept under the terms and conditions of this permit, the Louisiana Air Quality Regulations, or the Act;

C. Inspect any facilities, equipment (including monitoring methods and an operation and maintenance inspection), or operations regulated under this permit; and

D Sample or monitor, for the purpose of assuring compliance with this permit or as otherwise authorized by the Act or regulations adopted thereunder, any substances or parameters at any location.

XIII. If samples are taken under Section XII.D. above, the officer or employee obtaining such samples shall give the owner, operator or agent in charge a receipt describing the sample obtained. If requested prior to leaving the premises, a portion of each sample equal in volume or weight to the portion retained shall be given to the owner, operator or agent in charge. If an analysis is made of such samples, a copy of the analysis shall be furnished promptly to the owner, operator or agency in charge.

XIV. The permittee shall allow authorized officers and employees of the Department of Environmental Quality, upon presentation of identification, to enter upon the permittee's premises to investigate potential or alleged violations of the Act or the rules and regulations adopted thereunder. In such investigations, the permittee shall be notified at the time entrance is requested of the nature of the suspected violation. Inspections under this subsection shall be limited to the aspects of alleged violations. However, this shall not in any way preclude prosecution of all violations found

XV The permittee shall comply with the reporting requirements specified under LAC 33:III.919 as well as notification requirements specified under LAC 33:III 927.

XVI In the event of any change in ownership of the source described in this permit, the permittee and the succeeding owner shall notify the Office of Environmental Services, Air Permits Division, within ninety (90) days after the event, to amend this permit.

XVII Very small emissions to the air resulting from routine operations, that are predictable, expected, periodic, and quantifiable and that are submitted by the permitted facility and approved by the Air Permits Division are considered authorized discharges. Approved activities are noted in the General Condition XVII Activities List of this permit. To be approved as an authorized discharge, these very small releases must:

1. Generally be less than 5 TPY
2. Be less than the minimum emission rate (MER)
3. Be scheduled daily, weekly, monthly, etc., or
4. Be necessary prior to plant startup or after shutdown [line or compressor pressuring/depressuring for example]

These releases are not included in the permit totals because they are small and will have an insignificant impact on air quality. This general condition does not authorize the maintenance of a nuisance, or a danger to public health and safety. The permitted facility must comply with all applicable requirements, including release reporting under LAC 33:I.3901.

XVIII. Provisions of this permit may be appealed in writing pursuant to La. R.S. 30:2024(A) within 30 days from receipt of the permit. Only those provisions specifically appealed will be suspended by a request for hearing, unless the secretary or the assistant secretary elects to suspend other provisions as well. Construction cannot proceed except as specifically approved by the secretary or assistant secretary. A request for hearing must be sent to the following:

Attention: Office of the Secretary, Legal Services Division
La. Dept. of Environmental Quality
Post Office Box 4302
Baton Rouge, Louisiana 70821-4302

XIX. Certain Part 70 general conditions may duplicate or conflict with state general conditions. To the extent that any Part 70 conditions conflict with state general conditions, then the Part 70 general conditions control. To the extent that any Part 70 general conditions duplicate any state general conditions, then such state and Part 70 provisions will be enforced as if there is only one condition rather than two conditions.

General Information

AI ID: 4634 LOOP LLC - Port Complex
Activity Number: PER20070001
Permit Number: 1560-00027-03
Air - Minor (Synthetic) Modification

Also Known As:

ID	Name	User Group	Start Date
1560-00027	LOOP LLC - Port Complex	CDS Number	10-12-1996
72-0723344	LOOP LLC - Port Complex	Federal Tax ID	11-21-1999
LAD980698799	LOOP LLC - Port Complex	Hazardous Waste Notification	02-22-1983
LA0049492	LPDES #	LPDES Permit #	06-25-2003
WP0330	LWDPS #	LWDPS Permit #	06-25-2003
	Priority 2 Emergency Site	Priority 2 Emergency Site	07-20-2006
	Radiation General License	Radiation License Number	01-09-2002
29-006030	UST Facility ID #	Underground Storage Tanks	10-11-2002
2164	LOOP LLC - Port Complex	Water Permitting	11-21-1999

Physical Location: 4 Mi NE of
Galliano, LA

Mailing Address: East 101 A St
Galliano, LA 70354

Location of Front Gate: 29° 27' 45" latitude, 90° 18' 20" longitude, Coordinate Method: Interpolation - Map, Coordinate Datum: NAD27

Related People:

Name	Mailing Address	Phone (Type)	Relationship
CaSandra J. Cooper-Gates	PO Box 7250 Metairie, LA 700107250	5043639282 (WP)	Responsible Official for
CaSandra J. Cooper-Gates	PO Box 7250 Metairie, LA 700107250	5043639282 (WP)	Water Billing Party for

Related Organizations:

Name	Address	Phone (Type)	Relationship
LOOP LLC	PO Box 1670 Larose, LA 703731670	5043685667 (WP)	Operates
LOOP LLC	PO Box 1670 Larose, LA 703731670	5043685667 (WP)	Air Billing Party for
Louisiana Offshore Oil Port Inc	One Seine Court Box 6638 New Orleans, LA 70174		UST Billing Party for

SIC Codes: 4612, Crude petroleum pipelines

Note: This report entitled "General Information" contains a summary of facility-level information contained in LDEQ's TEMPO database for this facility and is not considered a part of the permit. Please review the information contained in this document for accuracy and completeness. If any changes are required or if you have questions regarding this document, you may contact Mr. David Ferrand, Environmental Assistance Division, at (225) 219-3247 or email your changes to facupdate@la.gov.

INVENTORIES

AI ID: 4634 - LOOP LLC - Port Complex

Activity Number: PER20070001

Permit Number: 1560-00027-03

Air - Minor (Synthetic) Modification

Subject Item Inventory:

ID	Description	Tank Volume	Max. Operating Rate	Normal Operating Rate	Contents	Operating Time
EQT003	1-78 Crude Relief Tank - External Floating Roof (Clovelly Dome)	2.31 million gallons		23.1 MM gallons/yr		8760 hr/yr (All Year
EQT004	5-78 Slop Oil Tank (Small Boat Harbor)	79315 gallons		84000 gallons/yr	wastwater and lube oils	8760 hr/yr (All Year
EQT005	7-78 Turbine Generator (Clovelly Dome)		275.6 MM BTU/hr	275.6 MM BTU/hr		320 hr/yr (All Year)
EQT006	11-78 Fourchon Booster Station Tank No. 1 - Diesel Fuel Oil	1.18 million gallons		23 MM gallons/yr		8760 hr/yr (All Year
EQT007	12-78 Salt Dome Cavities (9), Piping, and Brine Storage Reservoir (Clovelly Dome)	1806 million gallons		600 MM bbl/yr		8760 hr/yr (All Year
EQT008	13-78 Fourchon Booster Station Tank No. 2 - Diesel Fuel Oil	1.18 million gallons		23 MM gallons/yr		8760 hr/yr (All Year
EQT009	15-78 Fourchon Booster Station - Standby Generator			6.18 MM BTU/hr		69 hr/yr (All Year)
EQT010	16-78 Fire Pump (Small Boat Harbor)			1.01 MM BTU/hr		156 hr/yr (All Year)
EQT011	17-78 Operations Center Standby Generator (Clovelly Dome)			5.62 MM BTU/hr		52 hr/yr (All Year)
EQT012	18-78 Emergency Crude Transfer Pump (Clovelly Dome)			6.58 MM BTU/hr		264 hr/yr (All Year)
EQT013	19-78 Portable Diesel Generator (Clovelly Dome)			1.26 MM BTU/hr		52 hr/yr (All Year)
EQT014	20-78 Clovelly Fire Pump			1.92 MM BTU/hr		19 hr/yr (All Year)
EQT015	21-78 Standby Generator - Brine Storage Reservoir (Clovelly Dome)			1.26 MM BTU/hr		26 hr/yr (All Year)
EQT016	23-88 Tank 1 Operations Center - Gasoline Tank (Clovelly Dome)	1000 gallons		9000 gallons/yr		8760 hr/yr (All Year
EQT017	24-88 Tank 2 Operations Center - Gasoline Tank (Clovelly Dome)	1000 gallons		9000 gallons/yr		8760 hr/yr (All Year
EQT018	35-88 Fire School Fire Pump (Clovelly Dome)			.69 MM BTU/hr		626 hr/yr (All Year)
EQT019	38-91 Operations Center - Fire Pump (Clovelly Dome)			2.97 MM BTU/hr		52 hr/yr (All Year)
EQT020	5-99 Crude Oil Tankfarm Firewater Pump (Clovelly Dome)			1100 horsepower		52 hr/yr (All Year)
EQT021	1-07 Emergency Generator			755 brake hp		4.5 hr/yr (All Year)
EQT022	2-07 Emergency Generator			755 brake hp		4.5 hr/yr (All Year)
EQT023	3-07 Emergency Generator			755 brake hp		4.5 hr/yr (All Year)
EQT024	4-07 Emergency Generator			755 brake hp		4.5 hr/yr (All Year)
EQT025	5-07 Emergency Generator			364 brake hp		4.5 hr/yr (All Year)
EQT026	6-07 Emergency Generator			207 brake hp		4.5 hr/yr (All Year)
EQT027	1-99 Tank 6401 (Clovelly Dome)	600000 bbl		45000 bbl/day		8760 hr/yr (All Year
EQT028	2-99 Tank 6402 (Clovelly Dome)	600000 bbl		45000 bbl/day		8760 hr/yr (All Year
EQT029	3-99 Tank 6405 (Clovelly Dome)	600000 bbl		45000 bbl/day		8760 hr/yr (All Year
EQT030	4-99 Tank 6406 (Clovelly Dome)	600000 bbl		45000 bbl/day		8760 hr/yr (All Year
EQT031	6-02 Tank 6409 (Clovelly Dome)	600000 bbl		45000 bbl/day		8760 hr/yr (All Year
EQT032	7-02 Tank 6410 (Clovelly Dome)	600000 bbl		45000 bbl/day		8760 hr/yr (All Year
EQT033	8-07 Tank 6403 (Clovelly Dome)	600000 bbl		45000 bbl/day		8760 hr/yr (All Year
EQT034	9-07 Tank 6404 (Clovelly Dome)	600000 bbl		45000 bbl/day		8760 hr/yr (All Year
EQT035	10-07 Tank 6407 (Clovelly Dome)	600000 bbl		45000 bbl/day		8760 hr/yr (All Year
EQT036	11-07 Tank 6408 (Clovelly Dome)	600000 bbl		45000 bbl/day		8760 hr/yr (All Year

INVENTORIES

AI ID: 4634 - LOOP LLC - Port Complex
Activity Number: PER20070001
Permit Number: 1560-00027-03
Air - Minor (Synthetic) Modification

Subject Item Inventory:

ID	Description	Tank Volume	Max. Operating Rate	Normal Operating Rate	Contents	Operating Time
EQT037	12-07 Tank 6411 (Clovelly Dome)	600000 bbl		45000 bbl/day		8760 hr/yr (All Year
EQT038	13-07 Tank 6412 (Clovelly Dome)	600000 bbl		45000 bbl/day		8760 hr/yr (All Year
EQT039	14-07 Tank 6413 (Clovelly Dome)	600000 bbl		45000 bbl/day		8760 hr/yr (All Year
EQT040	15-07 Tank 6414 (Clovelly Dome)	600000 bbl		45000 bbl/day		8760 hr/yr (All Year
FUG001	10-78 Fugitive Emissions (Clovelly Dome)			Not applicable		8760 hr/yr (All Year

Subject Item Groups:

ID	Description	Included Components (from Above)
GRP003	Crude Oil Storage Tank CAP (Clovelly Dome)	EQT27 1-99 Tank 6401 (Clovelly Dome)
GRP003	Crude Oil Storage Tank CAP (Clovelly Dome)	EQT28 2-99 Tank 6402 (Clovelly Dome)
GRP003	Crude Oil Storage Tank CAP (Clovelly Dome)	EQT29 3-99 Tank 6405 (Clovelly Dome)
GRP003	Crude Oil Storage Tank CAP (Clovelly Dome)	EQT30 4-99 Tank 6406 (Clovelly Dome)
GRP003	Crude Oil Storage Tank CAP (Clovelly Dome)	EQT31 6-02 Tank 6409 (Clovelly Dome)
GRP003	Crude Oil Storage Tank CAP (Clovelly Dome)	EQT32 7-02 Tank 6410 (Clovelly Dome)
GRP003	Crude Oil Storage Tank CAP (Clovelly Dome)	EQT33 8-07 Tank 6403 (Clovelly Dome)
GRP003	Crude Oil Storage Tank CAP (Clovelly Dome)	EQT34 9-07 Tank 6404 (Clovelly Dome)
GRP003	Crude Oil Storage Tank CAP (Clovelly Dome)	EQT35 10-07 Tank 6407 (Clovelly Dome)
GRP003	Crude Oil Storage Tank CAP (Clovelly Dome)	EQT36 11-07 Tank 6408 (Clovelly Dome)
GRP003	Crude Oil Storage Tank CAP (Clovelly Dome)	EQT37 12-07 Tank 6411 (Clovelly Dome)
GRP003	Crude Oil Storage Tank CAP (Clovelly Dome)	EQT38 13-07 Tank 6412 (Clovelly Dome)
GRP003	Crude Oil Storage Tank CAP (Clovelly Dome)	EQT39 14-07 Tank 6413 (Clovelly Dome)
GRP003	Crude Oil Storage Tank CAP (Clovelly Dome)	EQT40 15-07 Tank 6414 (Clovelly Dome)
GRP004	Entire Facility	EQT3 1-78 Crude Relief Tank - External Floating Roof (Clovelly Dome)
GRP004	Entire Facility	EQT4 5-78 Slop Oil Tank (Small Boat Harbor)
GRP004	Entire Facility	EQT5 7-78 Turbine Generator (Clovelly Dome)
GRP004	Entire Facility	EQT6 11-78 Fourchon Booster Station Tank No. 1 - Diesel Fuel Oil
GRP004	Entire Facility	EQT7 12-78 Salt Dome Cavities (9), Piping, and Brine Storage Reservoir (Clovelly Dome)
GRP004	Entire Facility	EQT8 13-78 Fourchon Booster Station Tank No. 2 - Diesel Fuel Oil
GRP004	Entire Facility	EQT9 15-78 Fourchon Booster Station - Standby Generator
GRP004	Entire Facility	EQT10 16-78 Fire Pump (Small Boat Harbor)
GRP004	Entire Facility	EQT11 17-78 Operations Center Standby Generator (Clovelly Dome)
GRP004	Entire Facility	EQT12 18-78 Emergency Crude Transfer Pump (Clovelly Dome)
GRP004	Entire Facility	EQT13 19-78 Portable Diesel Generator (Clovelly Dome)
GRP004	Entire Facility	EQT14 20-78 Clovelly Fire Pump
GRP004	Entire Facility	EQT15 21-78 Standby Generator - Brine Storage Reservoir (Clovelly Dome)
GRP004	Entire Facility	EQT16 23-88 Tank 1 Operations Center - Gasoline Tank (Clovelly Dome)

INVENTORIES

AI ID: 4634 - LOOP LLC - Port Complex
Activity Number: PER20070001
Permit Number: 1560-00027-03
Air - Minor (Synthetic) Modification

Subject Item Groups:

ID	Description	Included Components (from Above)
GRP004	Entire Facility	EQT17 24-88 Tank 2 Operations Center - Gasoline Tank (Clovelly Dome)
GRP004	Entire Facility	EQT18 35-88 Fire School Fire Pump (Clovelly Dome)
GRP004	Entire Facility	EQT19 38-91 Operations Center - Fire Pump (Clovelly Dome)
GRP004	Entire Facility	EQT20 5-99 Crude Oil Tankfarm Firewater Pump (Clovelly Dome)
GRP004	Entire Facility	EQT21 1-07 Emergency Generator
GRP004	Entire Facility	EQT22 2-07 Emergency Generator
GRP004	Entire Facility	EQT23 3-07 Emergency Generator
GRP004	Entire Facility	EQT24 4-07 Emergency Generator
GRP004	Entire Facility	EQT25 5-07 Emergency Generator
GRP004	Entire Facility	EQT26 6-07 Emergency Generator
GRP004	Entire Facility	EQT27 1-99 Tank 6401 (Clovelly Dome)
GRP004	Entire Facility	EQT28 2-99 Tank 6402 (Clovelly Dome)
GRP004	Entire Facility	EQT29 3-99 Tank 6405 (Clovelly Dome)
GRP004	Entire Facility	EQT30 4-99 Tank 6406 (Clovelly Dome)
GRP004	Entire Facility	EQT31 6-02 Tank 6409 (Clovelly Dome)
GRP004	Entire Facility	EQT32 7-02 Tank 6410 (Clovelly Dome)
GRP004	Entire Facility	EQT33 8-07 Tank 6403 (Clovelly Dome)
GRP004	Entire Facility	EQT34 9-07 Tank 6404 (Clovelly Dome)
GRP004	Entire Facility	EQT35 10-07 Tank 6407 (Clovelly Dome)
GRP004	Entire Facility	EQT36 11-07 Tank 6408 (Clovelly Dome)
GRP004	Entire Facility	EQT37 12-07 Tank 6411 (Clovelly Dome)
GRP004	Entire Facility	EQT38 13-07 Tank 6412 (Clovelly Dome)
GRP004	Entire Facility	EQT39 14-07 Tank 6413 (Clovelly Dome)
GRP004	Entire Facility	EQT40 15-07 Tank 6414 (Clovelly Dome)
GRP004	Entire Facility	FUG1 10-78 Fugitive Emissions (Clovelly Dome)
GRP004	Entire Facility	GRP3 Crude Oil Storage Tank CAP (Clovelly Dome)

Relationships:

Stack Information:

ID		Velocity (ft/sec)	Flow Rate (cubic ft/min-actual)	Diameter (feet)	Discharge Area (square feet)	Height (feet)	Temperatu (oF)
EQT005	7-78 Turbine Generator (Clovelly Dome)	198	509000	4		40	928
EQT009	15-78 Fourchon Booster Station - Standby Generator	237	5014	.57		16	850
EQT010	16-78 Fire Pump (Small Boat Harbor)	198	809	.21		7	895
EQT011	17-78 Operations Center Standby Generator (Clovelly Dome)	161	6759	.67		18	865
EQT012	18-78 Emergency Crude Transfer Pump (Clovelly Dome)	225	5300	.6		16	880
EQT013	19-78 Portable Diesel Generator (Clovelly Dome)		212	.33		10	1100

INVENTORIES

AI ID: 4634 - LOOP LLC - Port Complex

Activity Number: PER20070001

Permit Number: 1560-00027-03

Air - Minor (Synthetic) Modification

Stack Information:

ID		Velocity (ft/sec)	Flow Rate (cubic ft/min-actual)	Diameter (feet)	Discharge Area (square feet)	Height (feet)	Temperatu (oF)
EQT014	20-78 Clovelly Fire Pump	238	1943	.42		12	185
EQT015	21-78 Standby Generator - Brine Storage Reservoir (Clovelly Dome)	212	1100	.33		10	1100
EQT018	35-88 Fire School Fire Pump (Clovelly Dome)	386.2	790	.21		6	820
EQT019	38-91 Operations Center - Fire Pump (Clovelly Dome)	386.2	790	.21		6	820
EQT020	5-99 Crude Oil Tankfarm Firewater Pump (Clovelly Dome)	1.35	104	1.28		6	870
EQT021	1-07 Emergency Generator	307.7	3625	.5		9.38	901
EQT022	2-07 Emergency Generator	307.7	3625	.5		9.38	901
EQT023	3-07 Emergency Generator	220.69	2600	.5		9.83	810
EQT024	4-07 Emergency Generator	220.69	2600	.5		9.83	810
EQT025	5-07 Emergency Generator	135.94	1130	.42		10.25	1056
EQT026	6-07 Emergency Generator	304.9	898	.25		10.58	950

Fee Information:

Subj Item Id	Multiplier	Units Of Measure	Fee Desc
GRP004			1364 - Crude Oil Pipeline - Facility with Over 500,000 BBLS Storage Capacity

EMISSION RATES FOR CRITERIA POLLUTANTS

AI ID: 4634 - LOOP LLC - Port Complex
Activity Number: PER20070001
Permit Number: 1560-00027-03
Air - Minor (Synthetic) Modification

All phases

	PM_{10}			SO_2			NOx			CO			VOC		
Subject Item	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
EQT 003 1-78													0.38	0.38	1.65
EQT 004 5-78													< 0.01	< 0.01	0.01
EQT 005 7-78	3.25	3.25	0.52	136.88	136.88	21.90	238.52	238.52	38.16	0.89	0.89	0.14	0.11	0.11	0.02
EQT 006 11-78													0.10	0.10	0.46
EQT 007 12-78													0.40	0.40	1.74
EQT 008 13-78													0.10	0.10	0.46
EQT 009 15-78	1.92	1.92	0.07	1.79	1.79	0.06	27.25	27.25	0.94	5.87	5.87	0.20	2.16	2.16	0.07
EQT 010 16-78	0.31	0.31	0.02	0.29	0.29	0.02	4.47	4.47	0.35	0.96	0.96	0.08	0.35	0.35	0.03
EQT 011 17-78	1.74	1.74	0.05	1.63	1.63	0.04	24.77	24.77	0.64	5.34	5.34	0.14	1.97	1.97	0.05
EQT 012 18-78	2.04	2.04	0.27	1.91	1.91	0.25	29.00	29.00	3.83	6.25	6.25	0.82	2.30	2.30	0.30
EQT 013 19-78	0.39	0.39	0.01	0.37	0.37	0.01	5.56	5.56	0.14	1.20	1.20	0.03	0.44	0.44	0.01
EQT 014 20-78	0.59	0.59	0.01	0.56	0.56	0.01	8.46	8.46	0.08	1.82	1.82	0.02	0.67	0.67	0.01
EQT 015 21-78	0.39	0.39	0.01	0.37	0.37	0.01	5.56	5.56	0.07	1.20	1.20	0.02	0.44	0.44	0.01
EQT 016 23-88													0.06	0.06	0.27
EQT 017 24-88													0.06	0.06	0.27
EQT 018 35-88	0.21	0.21	0.01	0.20	0.20	0.01	3.02	3.02	0.15	0.65	0.65	0.03	0.24	0.24	0.01
EQT 019 38-91	0.92	0.92	0.02	0.86	0.86	0.02	13.11	13.11	0.34	2.82	2.82	0.07	1.04	1.04	0.03
EQT 020 5-99	0.77	0.77	0.02	7.12	7.12	0.19	26.40	26.40	0.69	6.05	6.05	0.16	0.78	0.78	0.02

EMISSION RATES FOR CRITERIA POLLUTANTS

AI ID: 4634 - LOOP LLC - Port Complex
Activity Number: PER20070001
Permit Number: 1560-00027-03
Air - Minor (Synthetic) Modification

All phases

	PM_{10}			SO_2			NOx			CO			VOC		
Subject Item	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
EQT 021 1-07	0.53	0.53	< 0.01	4.89	4.89	0.01	18.12	18.12	0.04	4.15	4.15	0.01	0.53	0.53	< 0.01
EQT 022 2-07	0.53	0.53	< 0.01	4.89	4.89	0.01	18.12	18.12	0.04	4.15	4.15	0.01	0.53	0.53	< 0.01
EQT 023 3-07	0.53	0.53	< 0.01	4.89	4.89	0.01	18.12	18.12	0.04	4.15	4.15	0.01	0.53	0.53	< 0.01
EQT 024 4-07	0.53	0.53	< 0.01	4.89	4.89	0.01	18.12	18.12	0.04	4.15	4.15	0.01	0.53	0.53	< 0.01
EQT 025 5-07	0.80	0.80	< 0.01	0.75	0.75	< 0.01	11.28	11.28	0.03	2.43	2.43	0.01	0.90	0.90	< 0.01
EQT 026 6-07	0.46	0.46	< 0.01	0.42	0.42	< 0.01	6.42	6.42	0.01	1.38	1.38	< 0.01	0.51	0.51	< 0.01
EQT 027 1-99														2730.46	
EQT 028 2-99														2730.46	
EQT 029 3-99														2730.46	
EQT 030 4-99														2730.46	
EQT 031 6-02														2730.46	
EQT 032 7-02														2730.46	
EQT 033 8-07														2730.46	
EQT 034 9-07														2730.46	
EQT 035 10-07														2730.46	
EQT 036 11-07														2730.46	
EQT 037 12-07														2730.46	
EQT 038 13-07														2730.46	

EMISSION RATES FOR CRITERIA POLLUTANTS

AI ID: 4634 - LOOP LLC - Port Complex
Activity Number: PER20070001
Permit Number: 1560-00027-03
Air - Minor (Synthetic) Modification

All phases

	PM_{10}			SO_2			NOx			CO			VOC		
Subject Item	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
EQT 039 14-07														2730.46	
EQT 040 15-07														2730.46	
FUG 001 10-78													< 0.01	< 0.01	< 0.01
GRP 003 TANK CAP													20.18		88.39

Note: Emission rates in bold are from alternate scenarios and are not included in permitted totals

Permit Phase Totals:

PM10: 1.05 tons/yr
SO2: 22.56 tons/yr
NOx: 45.56 tons/yr
CO: 1.76 tons/yr
VOC: 93.82 tons/yr

Emission rates Notes:

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 4634 - LOOP LLC - Port Complex
Activity Number: PER20070001
Permit Number: 1560-00027-03
Air - Minor (Synthetic) Modification

All phases

	Acetaldehyde			Benzene			Cumene			Ethyl benzene			Formaldehyde		
Subject Item	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
EQT 003 i-78				0.004	0.004	0.017				< 0.001	< 0.001	0.002			
EQT 006 11-78				< 0.001	< 0.001	0.001				< 0.001	< 0.001	0.001			
EQT 007 12-78				0.002	0.002	0.010	< 0.001	< 0.001	0.002	0.002	0.002	0.007			
EQT 008 13-78				< 0.001	< 0.001	0.001				< 0.001	< 0.001	0.001			
EQT 012 18-78	0.005	0.005	0.001	0.006	0.006	0.001							0.008	0.008	0.001
EQT 016 23-88				< 0.001	< 0.001	0.001									
EQT 017 24-88				< 0.001	< 0.001	0.001									
EQT 027 1-99					29.76			0.273			1.91				
EQT 028 2-99					29.76			0.273			1.91				
EQT 029 3-99					29.76			0.273			1.91				
EQT 030 4-99					29.76			0.273			1.91				
EQT 031 6-02					29.76			0.273			1.91				
EQT 032 7-02					29.76			0.273			1.91				
EQT 033 8-07					29.76			0.273			1.91				
EQT 034 9-07					29.76			0.273			1.91				
EQT 035 10-07					29.76			0.273			1.91				
EQT 036 11-07					29.76			0.273			1.91				
EQT 037 12-07					29.76			0.273			1.91				

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 4634 - LOOP LLC - Port Complex
Activity Number: PER20070001
Permit Number: 1560-00027-03
Air - Minor (Synthetic) Modification

All phases

	Toluene			Xylene (mixed isomers)			n-Hexane		
Subject Item	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
EQT 003 1-78	0.002	0.002	0.009	0.001	0.001	0.005	0.004	0.004	0.019
EQT 006 11-78	0.002	0.002	0.011	0.006	0.006	0.027			
EQT 007 12-78	0.004	0.004	0.017	0.006	0.006	0.024	0.002	0.002	0.007
EQT 008 13-78	0.002	0.002	0.011	0.006	0.006	0.027			
EQT 012 18-78									
EQT 016 23-88	< 0.001	< 0.001	0.002				< 0.001	< 0.001	0.001
EQT 017 24-88	< 0.001	< 0.001	0.002				< 0.001	< 0.001	0.001
EQT 027 1-99		14.47			5.73			31.95	
EQT 028 2-99		14.47			5.73			31.95	
EQT 029 3-99		14.47			5.73			31.95	
EQT 030 4-99		14.47			5.73			31.95	
EQT 031 6-02		14.47			5.73			31.95	
EQT 032 7-02		14.47			5.73			31.95	
EQT 033 8-07		14.47			5.73			31.95	
EQT 034 9-07		14.47			5.73			31.95	
EQT 035 10-07		14.47			5.73			31.95	
EQT 036 11-07		14.47			5.73			31.95	
EQT 037 12-07		14.47			5.73			31.95	

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 4634 - LOOP LLC - Port Complex
Activity Number: PER20070001
Permit Number: 1560-00027-03
Air - Minor (Synthetic) Modification

All phases

	Acetaldehyde			Benzene			Cumene			Ethyl benzene			Formaldehyde		
Subject Item	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
EQT 038 13-07					29.76			0.273			1.91				
EQT 039 14-07					29.76			0.273			1.91				
EQT 040 15-07					29.76			0.273			1.91				
GRP 003 TANK CAP				0.203		0.890	0.005		0.021	0.026		0.112			

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 4634 - LOOP LLC - Port Complex
Activity Number: PER20070001
Permit Number: 1560-00027-03
Air - Minor (Synthetic) Modification

All phases

	Toluene			Xylene (mixed isomers)			n-Hexane		
Subject Item	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
EQT 038 13-07		14.47			5.73			31.95	
EQT 039 14-07		14.47			5.73			31.95	
EQT 040 15-07		14.47			5.73			31.95	
GRP 003 TANK CAP	0.123		0.539	0.083		0.364	0.210		0.920

Note: Emission rates in bold are from alternate scenarios and are not included in permitted totals

Permit Parameter Totals:

Acetaldehyde: 0.001 tons/yr

Benzene: 0.924 tons/yr

Cumene: 0.023 tons/yr

Ethyl benzene: 0.124 tons/yr

Formaldehyde: 0.001 tons/yr

n-Hexane: 0.948 tons/yr

Toluene: 0.590 tons/yr

Xylene (mixed isomers): 0.447 tons/yr

Emission Rates Notes:

SPECIFIC REQUIREMENTS

AI ID: 4634 - LOOP LLC - Port Complex
Activity Number: PER20070001
Permit Number: 1560-00027-03
Air - Minor (Synthetic) Modification

EQT003 1-78 Crude Relief Tank - External Floating Roof (Clovelly Dome)

1 Equip with a submerged fill pipe. [LAC 33:III.2103.B]
2 Seal closure devices required in LAC 33:III.2103.D shall have no visible holes, tears, or other openings in the seals or seal fabric. [LAC 33:III.2103.D.2.a]
3 Seal closure devices required in LAC 33:III.2103.D shall be intact and uniformly in place around the circumference of the floating roof and the tank wall. [LAC 33:III.2103.D.2.b]
4 Seal gap area <= 1 in^2/ft of tank diameter (6.5 cm2/0.3 m), for gaps between the secondary seal and tank wall that exceed 1/8 inch (0.32 cm) in width. [LAC 33:III.2103.D.2.c]
Which Months: All Year Statistical Basis: None specified
5 Seal gap area <= 10 in^2/ft of tank diameter (65 cm2/0.3 m), for gaps between the primary seal and tank wall that exceed 1/8 inch (0.32 cm) in width. [LAC 33:III.2103.D.2.d]
Which Months: All Year Statistical Basis: None specified
6 Secondary Seal or closure mechanism monitored by visual inspection/determination semiannually. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified
7 Secondary seals: Seal gap area & width monitored by measurement annually at any tank level, provided the roof is off its legs. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified
8 Primary seals: Seal gap area & width monitored by measurement once every five years at any tank level, provided the roof is off its legs. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified
9 Equipment/operational data recordkeeping by electronic or hard copy upon occurrence of event. Keep records of conditions that are not up to the standards described in LAC 33:III.2103.D.2, and the date(s) that the standards are not met. Notify the administrative authority within seven days of noncompliance with LAC 33:III.2103.D.2. [LAC 33:III.2103.D.2.e]
10 Initiate repairs of seals within seven working days of recognition of defective conditions by ordering appropriate parts, to avoid noncompliance with LAC 33:III.2103. Complete repairs within three months of the ordering of the repair parts. [LAC 33:III.2103.D.2.e]
11 Provide all openings in the external floating roof (except for automatic bleeder vents, rim space vent, and leg sleeves) with a projection below the liquid surface. Equip each opening in the roof (except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves) with a cover, seal or lid that is to be maintained in a closed position at all times except when the device is in actual use. Keep automatic bleeder vents closed at all times except when the roof is being floated off the roof leg supports. Set rim vents to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Equip any emergency roof drain with a slotted membrane fabric cover or equivalent cover that covers at least 90 percent of the opening. [LAC 33:III.2103.D.3]
12 Equip with an external floating roof consisting of a pontoon type roof, double deck type roof, or external floating cover which will rest or float on the surface of the liquid contents and is equipped with a primary closure seal to close the space between the roof edge and tank wall and a continuous secondary seal (a rim mounted secondary) extending from the floating roof to the tank wall. [LAC 33:III.2103.D]
13 Determine compliance with LAC 33:III.2103.D.2 and 4 using the methods in LAC 33:III.2103.H.1. [LAC 33:III.2103.H.1]
14 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. [LAC 33:III.2103.H.3]
15 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]
16 The primary seal is to be either a metallic shoe seal, a liquid-mounted seal, or a vapor-mounted seal. Subpart Ka. [40 CFR 60.112a(a)(1)(i)]
17 Seal gap area <= 10.0 in^2/ft (212 sq cm/meter) of tank diameter for the accumulated area of gaps between the tank wall and the mechanical shoe seal or liquid-mounted primary seal. Subpart Ka. [40 CFR 60.112a(a)(1)(i)(A)]
Which Months: All Year Statistical Basis: None specified
18 Seal gap width <= 1.5 in (3.81 cm) for the width of any portion of any gap between the tank wall and the mechanical shoe seal or liquid-mounted primary seal. Subpart Ka. [40 CFR 60.112a(a)(1)(i)(A)]
Which Months: All Year Statistical Basis: None specified

EQT003 1-78 Crude Relief Tank - External Floating Roof (Clovelly Dome)

19 One end of the primary seal metallic shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 24 inches (61 centimeters) above the stored liquid surface. Subpart Ka. [40 CFR 60.112a(a)(1)(i)(C)]

20 There are to be no holes, tears, or other openings in the shoe, primary seal fabric, or seal envelope. Subpart Ka. [40 CFR 60.112a(a)(1)(i)(D)]

21 Install the secondary seal above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in 40 CFR 60.112a(a)(1)(ii)(B). Subpart Ka. [40 CFR 60.112a(a)(1)(ii)(A)]

22 Seal gap area <= 1.0 in^2/ft (21.2 sq cm/meter) of tank diameter for the accumulated area of gaps between the tank wall and the secondary seal used in combination with a metallic shoe or liquid-mounted primary seal. Subpart Ka. [40 CFR 60.112a(a)(1)(ii)(B)]
Which Months: All Year Statistical Basis: None specified

23 Seal gap width <= 0.5 in (1.27 cm) for the width of any portion of any gap between the tank wall and the secondary seal used in combination with a metallic shoe or liquid-mounted primary seal. Subpart Ka. [40 CFR 60.112a(a)(1)(ii)(B)]
Which Months: All Year Statistical Basis: None specified

24 There are to be no holes, tears or other openings in the secondary seal or seal fabric. Subpart Ka. [40 CFR 60.112a(a)(1)(ii)(C)]

25 Each opening in the roof except for automatic bleeder vents and rim space vents is to provide a projection below the liquid surface. Equip each opening in the roof except for automatic bleeder vents, rim space vents and leg sleeves with a cover, seal or lid and maintain in a closed position at all times (i.e., no visible gap) except when the device is in actual use or as described in 40 CFR 60.112a(a)(1)(iv). Close automatic bleeder vents at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports. Set rim vents to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Subpart Ka. [40 CFR 60.112a(a)(1)(iii)]

26 Provide each emergency roof drain with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening. Subpart Ka. [40 CFR 60.112a(a)(1)(iv)]

27 Equip with an external floating roof consisting of a pontoon-type or double-deck-type cover that rests on the surface of the liquid contents and is equipped with a closure device between the tank wall and the roof edge. Except as provided in 40 CFR 60.112a(a)(1)(ii)(D), the closure device is to consist of two seals, one (secondary) above the other (primary). The roof is to be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill and when the tank is completely emptied and subsequently refilled. The process of emptying and refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. Subpart Ka. [40 CFR 60.112a(a)(1)]

28 Seal gap area & width monitored by measurement at the regulation's specified frequency. Determine the gap areas and maximum gap widths between the primary seal and the tank wall within 60 days of the initial fill with petroleum liquid and at least once every 5 years thereafter using the procedures in 40 CFR 60.113a(a)(1)(ii). Accomplish all primary seal inspections or gap measurements which require the removal or dislodging of the secondary seal as rapidly as possible and replace the secondary seal as soon as possible. Subpart Ka. [40 CFR 60.113a(a)(1)(i)(A)]
Which Months: All Year Statistical Basis: None specified

29 Seal gap area & width monitored by measurement at the regulation's specified frequency. Determine the gap areas and maximum gap widths between the secondary seal and the tank wall within 60 days of the initial fill with petroleum liquid and at least once every year thereafter using the procedures in 40 CFR 60.113a(a)(1)(ii). Subpart Ka. [40 CFR 60.113a(a)(1)(i)(B)]
Which Months: All Year Statistical Basis: None specified

30 Gap measurement(s) recordkeeping by electronic or hard copy upon each occurrence of gap measurement performance. Each record shall identify the vessel on which the measurement was performed and shall contain the date of the seal gap measurement, the raw data obtained in the measurement process required by 40 CFR 60.113a(a)(1)(ii) and the calculation required by 40 CFR 60.113a(a)(1)(iii). Keep records of each gap measurement at the plant for a period of at least 2 years following the date of measurement. Subpart Ka. [40 CFR 60.113a(a)(1)(i)(D)]

EQT003 1-78 Crude Relief Tank - External Floating Roof (Clovelly Dome)

31 Submit report: Due to DEQ within 60 days of the date of seal gap measurements, if either the seal gap calculated in accord with 40 CFR 60.113a(a)(1)(iii) or the measured maximum seal gap exceeds the limitations specified by 40 CFR 60.112a. The report shall identify the vessel and list each reason why the vessel did not meet the specifications of 40 CFR 60.112a. The report shall also describe the actions necessary to bring the storage vessel into compliance with the specifications of 40 CFR 60.112a. Subpart Ka. [40 CFR 60.113a(a)(1)(i)(E)]

32 Submit notification: Due to DEQ at least 30 days prior to the gap measurement to afford DEQ to have an observer present. Subpart Ka. [40 CFR 60.113a(a)(1)(iv)]

33 Petroleum liquid storage data recordkeeping by electronic or hard copy continuously. Maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period, except as provided in 40 CFR 60.115a(d). Subpart Kat all timesa. [40 CFR 60.115a]

EQT005 7-78 Turbine Generator (Clovelly Dome)

34 Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes. [LAC 33:III.1311.C]
Which Months: All Year Statistical Basis: Six-minute average

35 Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Record and keep on site for at least two years the data required to demonstrate exemption from the provisions of LAC 33:III.Chapter 15. Record all emissions data in the units of the standard using the averaging time of the standard. Make records available to a representative of DEQ or the U.S. EPA on request. [LAC 33:III.1513]

36 Operating time <= 320 hr/yr. Noncompliance with this limitation is a reportable violation of the permit. Notify the Office of Environmental Compliance, Enforcement Division if total annual operating time for the turbine generator exceeds the maximum listed in this specific condition for any twelve consecutive month period. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum

37 Operating time monitored by technically sound method continuously during operation as dictated during emergency events. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum

38 Operating time recordkeeping by electronic or hard copy monthly. Keep records of the total operating time of the turbine generator each month, as well as the total operating time of the turbine generator for the last twelve months. Make records available for inspection by DEQ personnel. [LAC 33:III.501.C.6]

39 Submit report: Due annually, by the 31st of March. Report the total annual operating time of the turbine generator for the preceding calendar year to the Office of Environmental Compliance, Enforcement Division. [LAC 33:III.501.C.6]

40 Fuel sulfur content <= 0.8 % by weight (8000 ppmw) for any fuel burned. Subpart GG. [40 CFR 60.333(b)]
Which Months: All Year Statistical Basis: None specified

41 Fuel sulfur content monitored by the regulation's specified method(s) at the regulation's specified frequency, except as specified in 40 CFR 60.334(h)(3). Monitor the total sulfur content of the fuel being fired in the turbine using total sulfur methods described in 40 CFR 60.335(b)(10). Subpart GG. [40 CFR 60.334(h)(1)]
Which Months: All Year Statistical Basis: None specified

42 Submit quarterly excess emissions report: Due by the 30th day following the end of each calendar quarter. Report periods during which an exemption provided in 40 CFR 60.332(f) is in effect. Report the date and time the air pollution control system was deactivated, and the date and time the air pollution control system was reactivated. Subpart GG. [40 CFR 60.334(j)(3)]

43 Include each period during which an exemption provided in 40 CFR 60.332(k) is in effect in the report required in 40 CFR 60.7(c). For each period, report the type, reasons, and duration of the firing of the emergency fuel. Subpart GG. [40 CFR 60.334(j)(4)]

44 Submit excess emissions reports and monitor downtime in accordance with 40 CFR 60.7(c). Report excess emissions for all periods of unit operation, including startup, shutdown and malfunction. Subpart GG. [40 CFR 60.334(j)]

45 Determine compliance using the test methods and procedures specified in 40 CFR 60.335(a) through (c). Subpart GG. [40 CFR 60.335]

EQT009 15-78 Fourchon Booster Station - Standby Generator

46 Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes. [LAC 33:III.1311.C]
Which Months: All Year Statistical Basis: Six-minute average

47 Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Record and keep on site for at least two years the data required to demonstrate exemption from the provisions of LAC 33:III.Chapter 15. Record all emissions data in the units of the standard using the averaging time of the standard. Make records available to a representative of DEQ or the U.S. EPA on request. [LAC 33:III.1513]

EQT010 16-78 Fire Pump (Small Boat Harbor)

48 Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes. [LAC 33:III.1311.C]
Which Months: All Year Statistical Basis: Six-minute average

49 Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Record and keep on site for at least two years the data required to demonstrate exemption from the provisions of LAC 33:III.Chapter 15. Record all emissions data in the units of the standard using the averaging time of the standard. Make records available to a representative of DEQ or the U.S. EPA on request. [LAC 33:III.1513]

EQT011 17-78 Operations Center Standby Generator (Clovelly Dome)

50 Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes. [LAC 33:III.1311.C]
Which Months: All Year Statistical Basis: Six-minute average

51 Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Record and keep on site for at least two years the data required to demonstrate exemption from the provisions of LAC 33:III.Chapter 15. Record all emissions data in the units of the standard using the averaging time of the standard. Make records available to a representative of DEQ or the U.S. EPA on request. [LAC 33:III.1513]

EQT012 18-78 Emergency Crude Transfer Pump (Clovelly Dome)

52 Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes. [LAC 33:III.1311.C]
Which Months: All Year Statistical Basis: Six-minute average

53 Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Record and keep on site for at least two years the data required to demonstrate exemption from the provisions of LAC 33:III.Chapter 15. Record all emissions data in the units of the standard using the averaging time of the standard. Make records available to a representative of DEQ or the U.S. EPA on request. [LAC 33:III.1513]

EQT013 19-78 Portable Diesel Generator (Clovelly Dome)

54 Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes. [LAC 33:III.1311.C]
Which Months: All Year Statistical Basis: Six-minute average

55 Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Record and keep on site for at least two years the data required to demonstrate exemption from the provisions of LAC 33:III.Chapter 15. Record all emissions data in the units of the standard using the averaging time of the standard. Make records available to a representative of DEQ or the U.S. EPA on request. [LAC 33:III.1513]

EQT014 20-78 Clovelly Fire Pump

56 Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes. [LAC 33:III.1311.C]
Which Months: All Year Statistical Basis: Six-minute average

57 Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Record and keep on site for at least two years the data required to demonstrate exemption from the provisions of LAC 33:III.Chapter 15. Record all emissions data in the units of the standard using the averaging time of the standard. Make records available to a representative of DEQ or the U.S. EPA on request. [LAC 33:III.1513]

EQT015 21-78 Standby Generator - Brine Storage Reservoir (Clovelly Dome)

58 Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes. [LAC 33:III.1311.C]
Which Months: All Year Statistical Basis: Six-minute average

59 Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Record and keep on site for at least two years the data required to demonstrate exemption from the provisions of LAC 33:III.Chapter 15. Record all emissions data in the units of the standard using the averaging time of the standard. Make records available to a representative of DEQ or the U.S. EPA on request. [LAC 33:III.1513]

EQT016 23-88 Tank 1 Operations Center - Gasoline Tank (Clovelly Dome)

60 Equip with a submerged fill pipe. [LAC 33:III.2103.A]

61 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. [LAC 33:III.2103.H.3]

62 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

EQT017 24-88 Tank 2 Operations Center - Gasoline Tank (Clovelly Dome)

63 Equip with a submerged fill pipe. [LAC 33:III.2103.A]

64 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. [LAC 33:III.2103.H.3]

65 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

EQT018 35-88 Fire School Fire Pump (Clovelly Dome)

66 Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes. [LAC 33:III.1311.C]
Which Months: All Year Statistical Basis: Six-minute average

67 Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Record and keep on site for at least two years the data required to demonstrate exemption from the provisions of LAC 33:III.Chapter 15. Record all emissions data in the units of the standard using the averaging time of the standard. Make records available to a representative of DEQ or the U.S. EPA on request. [LAC 33:III.1513]

EQT019 38-91 Operations Center - Fire Pump (Clovelly Dome)

EQT019 38-91 Operations Center - Fire Pump (Clovelly Dome)

68 Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes. [LAC 33:III.1311.C]
Which Months: All Year Statistical Basis: Six-minute average

69 Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Record and keep on site for at least two years the data required to demonstrate exemption from the provisions of LAC 33:III.Chapter 15. Record all emissions data in the units of the standard using the averaging time of the standard. Make records available to a representative of DEQ or the U.S. EPA on request. [LAC 33:III.1513]

EQT020 5-99 Crude Oil Tankfarm Firewater Pump (Clovelly Dome)

70 Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes. [LAC 33:III.1311.C]
Which Months: All Year Statistical Basis: Six-minute average

71 Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Record and keep on site for at least two years the data required to demonstrate exemption from the provisions of LAC 33:III.Chapter 15. Record all emissions data in the units of the standard using the averaging time of the standard. Make records available to a representative of DEQ or the U.S. EPA on request. [LAC 33:III.1513]

EQT021 1-07 Emergency Generator

72 Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes. [LAC 33:III.1311.C]
Which Months: All Year Statistical Basis: Six-minute average

73 Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Record and keep on site for at least two years the data required to demonstrate exemption from the provisions of LAC 33:III.Chapter 15. Record all emissions data in the units of the standard using the averaging time of the standard. Make records available to a representative of DEQ or the U.S. EPA on request. [LAC 33:III.1513]

EQT022 2-07 Emergency Generator

74 Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes. [LAC 33:III.1311.C]
Which Months: All Year Statistical Basis: Six-minute average

75 Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Record and keep on site for at least two years the data required to demonstrate exemption from the provisions of LAC 33:III.Chapter 15. Record all emissions data in the units of the standard using the averaging time of the standard. Make records available to a representative of DEQ or the U.S. EPA on request. [LAC 33:III.1513]

EQT023 3-07 Emergency Generator

76 Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes. [LAC 33:III.1311.C]
Which Months: All Year Statistical Basis: Six-minute average

77 Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Record and keep on site for at least two years the data required to demonstrate exemption from the provisions of LAC 33:III.Chapter 15. Record all emissions data in the units of the standard using the averaging time of the standard. Make records available to a representative of DEQ or the U.S. EPA on request. [LAC 33:III.1513]

EQT024 4-07 Emergency Generator

78 Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes. [LAC 33:III.1311.C]
Which Months: All Year Statistical Basis: Six-minute average

79 Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Record and keep on site for at least two years the data required to demonstrate exemption from the provisions of LAC 33:III.Chapter 15. Record all emissions data in the units of the standard using the averaging time of the standard. Make records available to a representative of DEQ or the U.S. EPA on request. [LAC 33:III.1513]

EQT025 5-07 Emergency Generator

80 Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes. [LAC 33:III.1311.C]
Which Months: All Year Statistical Basis: Six-minute average

81 Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Record and keep on site for at least two years the data required to demonstrate exemption from the provisions of LAC 33:III.Chapter 15. Record all emissions data in the units of the standard using the averaging time of the standard. Make records available to a representative of DEQ or the U.S. EPA on request. [LAC 33:III.1513]

EQT026 6-07 Emergency Generator

82 Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes. [LAC 33:III.1311.C]
Which Months: All Year Statistical Basis: Six-minute average

83 Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Record and keep on site for at least two years the data required to demonstrate exemption from the provisions of LAC 33:III.Chapter 15. Record all emissions data in the units of the standard using the averaging time of the standard. Make records available to a representative of DEQ or the U.S. EPA on request. [LAC 33:III.1513]

EQT027 1-99 Tank 6401 (Clovelly Dome)

84 Equip with a submerged fill pipe. [LAC 33:III.2103.B]

85 Seal closure devices required in LAC 33:III.2103.D shall have no visible holes, tears, or other openings in the seals or seal fabric. [LAC 33:III.2103.D.2.a]

86 Seal closure devices required in LAC 33:III.2103.D shall be intact and uniformly in place around the circumference of the floating roof and the tank wall. [LAC 33:III.2103.D.2.b]

87 Seal gap area <= 1 in^2/ft of tank diameter (6.5 cm2/0.3 m), for gaps between the secondary seal and tank wall that exceed 1/8 inch (0.32 cm) in width. [LAC 33:III.2103.D.2.c]
Which Months: All Year Statistical Basis: None specified

88 Seal gap area <= 10 in^2/ft of tank diameter (65 cm2/0.3 m), for gaps between the primary seal and tank wall that exceed 1/8 inch (0.32 cm) in width. [LAC 33:III.2103.D.2.d]
Which Months: All Year Statistical Basis: None specified

89 Secondary Seal or closure mechanism monitored by visual inspection/determination semiannually. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

90 Secondary seals: Seal gap area & width monitored by measurement annually at any tank level, provided the roof is off its legs. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

91 Primary seals: Seal gap area & width monitored by measurement once every five years at any tank level, provided the roof is off its legs. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

EQT027 1-99 Tank 6401 (Clovelly Dome)

92 Equipment/operational data recordkeeping by electronic or hard copy upon occurrence of event. Keep records of conditions that are not up to the standards described in LAC 33:III.2103.D.2, and the date(s) that the standards are not met. Notify the administrative authority within seven days of noncompliance with LAC 33:III.2103.D.2. [LAC 33:III.2103.D.2.e]

93 Initiate repairs of seals within seven working days of recognition of defective conditions by ordering appropriate parts, to avoid noncompliance with LAC 33:III.2103. Complete repairs within three months of the ordering of the repair parts. [LAC 33:III.2103.D.2.e]

94 Provide all openings in the external floating roof (except for automatic bleeder vents, rim space vent, and leg sleeves) with a projection below the liquid surface. Equip each opening in the roof (except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves) with a cover, seal or lid that is to be maintained in a closed position at all times except when the device is in actual use. Keep automatic bleeder vents closed at all times except when the roof is being floated off the roof leg supports. Set rim vents to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Equip any emergency roof drain with a slotted membrane fabric cover or equivalent cover that covers at least 90 percent of the opening. [LAC 33:III.2103.D.3]

95 Equip with an external floating roof consisting of a pontoon type roof, double deck type roof, or external floating cover which will rest or float on the surface of the liquid contents and is equipped with a primary closure seal to close the space between the roof edge and tank wall and a continuous secondary seal (a rim mounted secondary) extending from the floating roof to the tank wall. [LAC 33:III.2103.D]

96 Determine compliance with LAC 33:III.2103.D.2 and 4 using the methods in LAC 33:III.2103.H.1. [LAC 33:III.2103.H.1]

97 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. [LAC 33:III.2103.H.3]

98 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

99 Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, equip each opening in the roof with a gasketed cover, seal, or lid and maintain in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Close automatic bleeder vents at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. Set rim vents to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting. Equip automatic bleeder vents and rim space vents with gaskets. Provide each emergency roof drain with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening. Subpart Kb. [40 CFR 60.112b(a)(2)(ii)]

100 Equip with an external floating roof consisting of a pontoon-type or double-deck type cover that rests on the liquid surface in a vessel with no fixed roof. Equip with a closure device between the wall of the storage vessel and the roof edge. The closure device consists of two seals, secondary above the primary. The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in 40 CFR 60.113b(b)(4), the primary seal shall completely cover the annular space between the edge of the floating roof and tank wall. The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in 40 CFR 60.113b(b)(4). The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. Subpart Kb. [40 CFR 60.112b(a)(2)]

101 Seal gap area & width monitored by measurement at the regulation's specified frequency. Using the procedures in 40 CFR 60.113b(b)(2) determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel during the hydrostatic testing of the vessel or within 60 days of the initial fill with VOL and at least once every 5 years thereafter. Subpart Kb. [40 CFR 60.113b(b)(1)(i)]
Which Months: All Year Statistical Basis: None specified

102 Seal gap area & width monitored by measurement at the regulation's specified frequency. Using the procedures in 40 CFR 60.113b(b)(2) determine the gap areas and maximum gap widths between the secondary seal and the wall of the storage vessel within 60 days of the initial fill with VOL and at least once per year thereafter. Subpart Kb. [40 CFR 60.113b(b)(1)(ii)]
Which Months: All Year Statistical Basis: None specified

EQT027 1-99 Tank 6401 (Clovelly Dome)

103 Add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in 40 CFR 60.113b(b)(4). Subpart Kb. [40 CFR 60.113b(b)(3)]

104 Seal gap area <= 212 cm^2/m of tank diameter (accumulated area) for gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(i)]
Which Months: All Year Statistical Basis: None specified

105 Seal gap width <= 3.81 cm for the width of any portion of any gap between the tank wall and the mechanical shoe or liquid-mounted primary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(i)]
Which Months: All Year Statistical Basis: None specified

106 One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61 cm above the stored liquid surface. Subpart Kb. [40 CFR 60.113b(b)(4)(i)(A)]

107 There are to be no holes, tears, or other openings in the shoe, primary seal fabric, or seal envelope. Subpart Kb. [40 CFR 60.113b(b)(4)(i)(B)]

108 Install the secondary seal above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in 60.113b(b)(2)(iii). Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(A)]

109 Seal gap area <= 21.2 cm^2/m of tank diameter (accumulated area) for gaps between the tank wall and the secondary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(B)]
Which Months: All Year Statistical Basis: None specified

110 Seal gap width <= 1.27 cm for the width of any portion of any gap between the tank wall and the secondary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(B)]
Which Months: All Year Statistical Basis: None specified

111 There are to be no holes, tears, or other openings in the secondary seal or seal fabric. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(C)]

112 Make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in 40 CFR 60.113b(b)(4) (i) and (ii) except as specified in 40 CFR 60.113b(b)(4)(iii). Subpart Kb. [40 CFR 60.113b(b)(4)]

113 Submit notification: Due at least 30 days in advance of any gap measurements required by 40 CFR 60.113b(b)(1) to afford DEQ the opportunity to have an observer present. Subpart Kb. [40 CFR 60.113b(b)(5)]

114 If the external floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with VOL. Subpart Kb. [40 CFR 60.113b(b)(6)(i)]

115 Submit notification in writing: Due at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by 40 CFR 60.113b(6) to afford DEQ an opportunity to inspect the storage vessel prior to refilling. If the inspection required by paragraph 40 CFR 60.113b(b)(6) is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, notify DEQ at least 7 days prior to the refilling of the storage vessel. Notify by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, submit notification in writing including the written documentation and send by express mail so that it is received by DEQ at least 7 days prior to the refilling. Subpart Kb. [40 CFR 60.113b(b)(6)(ii)]

116 Tank roof and seals monitored by visual inspection/determination at the regulation's specified frequency. Inspect the external floating roof, the primary seal, the secondary seal, and fittings each time the storage vessel is emptied and degassed. Subpart Kb. [40 CFR 60.113b(b)(6)]
Which Months: All Year Statistical Basis: None specified

117 Submit a report: Due to DEQ as an attachment to the notification required by 40 CFR 60.7(a)(3). This report shall describe the control equipment and certify that the control equipment meets the specifications of 40 CFR 60.112b(a)(2) and 60.113b(b)(2), (b)(3), and (b)(4). Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(1)]

118 Submit a report: Due to DEQ within 60 days of performing the seal gap measurements required by 40 CFR 60.113b(b)(1). The report shall contain: 1) the date of measurement, 2) the raw data obtained in the measurement, 3) the calculations described in 40 CFR 60.113b(b)(2) and (b)(3). Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(2)]

EQT027 1-99 Tank 6401 (Clovelly Dome)

119 Gap measurement(s) recordkeeping by electronic or hard copy upon each occurrence of gap measurement performance, as required by 40 CFR 60.113b(b). Each record shall identify the storage vessel in which the measurement was performed and shall contain: 1) the date of measurement, 2) the raw data obtained in the measurement, 3) the calculations described in 40 CFR 60.113b(b)(2) and (b)(3). Keep copies of all records for at least two years. Subpart Kb. [40 CFR 60.115b(b)(3)]

120 Submit a report: Due to DEQ within 30 days after each seal gap measurement that detects gaps exceeding the limitations specified by 40 CFR 60.113b(b)(4). The report will identify the vessel and contain the information specified in 40 CFR 60.115b(b)(2) and the date the vessel was emptied or the repairs made and date of repair. Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(4)]

121 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. Keep copies of all records for the life of the source as specified by 40 CFR 60.116b(a). Subpart Kb. [40 CFR 60.116b(b)]

122 VOL storage data recordkeeping by electronic or hard copy continuously. Records consist of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period. Keep copies of all records for at least two years. Subpart Kb. [40 CFR 60.116b(c)]

EQT028 2-99 Tank 6402 (Clovelly Dome)

123 Equip with a submerged fill pipe. [LAC 33:III.2103.B]

124 Seal closure devices required in LAC 33:III.2103.D shall have no visible holes, tears, or other openings in the seals or seal fabric. [LAC 33:III.2103.D.2.a]

125 Seal closure devices required in LAC 33:III.2103.D shall be intact and uniformly in place around the circumference of the floating roof and the tank wall. [LAC 33:III.2103.D.2.b]

126 Seal gap area <= 1 in^2/ft of tank diameter (6.5 cm2/0.3 m), for gaps between the secondary seal and tank wall that exceed 1/8 inch (0.32 cm) in width. [LAC 33:III.2103.D.2.c]
Which Months: All Year Statistical Basis: None specified

127 Seal gap area <= 10 in^2/ft of tank diameter (65 cm2/0.3 m), for gaps between the primary seal and tank wall that exceed 1/8 inch (0.32 cm) in width. [LAC 33:III.2103.D.2.d]
Which Months: All Year Statistical Basis: None specified

128 Secondary Seal or closure mechanism monitored by visual inspection/determination semiannually. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

129 Secondary seals: Seal gap area & width monitored by measurement annually at any tank level, provided the roof is off its legs. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

130 Primary seals: Seal gap area & width monitored by measurement once every five years at any tank level, provided the roof is off its legs. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

131 Equipment/operational data recordkeeping by electronic or hard copy upon occurrence of event. Keep records of conditions that are not up to the standards described in LAC 33:III.2103.D.2, and the date(s) that the standards are not met. Notify the administrative authority within seven days of noncompliance with LAC 33:III.2103.D.2. [LAC 33:III.2103.D.2.e]

132 Initiate repairs of seals within seven working days of recognition of defective conditions by ordering appropriate parts, to avoid noncompliance with LAC 33:III.2103. Complete repairs within three months of the ordering of the repair parts. [LAC 33:III.2103.D.2.e]

133 Provide all openings in the external floating roof (except for automatic bleeder vents, rim space vent, and leg sleeves) with a projection below the liquid surface. Equip each opening in the roof (except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves) with a cover, seal or lid that is to be maintained in a closed position at all times except when the device is in actual use. Keep automatic bleeder vents closed at all times except when the roof is being floated off the roof leg supports. Set rim vents to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Equip any emergency roof drain with a slotted membrane fabric cover or equivalent cover that covers at least 90 percent of the opening. [LAC 33:III.2103.D.3]

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134 Equip with an external floating roof consisting of a pontoon type roof, double deck type roof, or external floating cover which will rest or float on the surface of the liquid contents and is equipped with a primary closure seal to close the space between the roof edge and tank wall and a continuous secondary seal (a rim mounted secondary) extending from the floating roof to the tank wall. [LAC 33:III.2103.D]

135 Determine compliance with LAC 33:III.2103.D.2 and 4 using the methods in LAC 33:III.2103.H.1. [LAC 33:III.2103.H.1]

136 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. [LAC 33:III.2103.H.3]

137 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

138 Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, equip each opening in the roof with a gasketed cover, seal, or lid and maintain in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Close automatic bleeder vents at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. Set rim vents to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting. Equip automatic bleeder vents and rim space vents with gaskets. Provide each emergency roof drain with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening. Subpart Kb. [40 CFR 60.112b(a)(2)(ii)]

139 Equip with an external floating roof consisting of a pontoon-type or double-deck type cover that rests on the liquid surface in a vessel with no fixed roof. Equip with a closure device between the wall of the storage vessel and the roof edge. The closure device consists of two seals, secondary above the primary. The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in 40 CFR 60.113b(b)(4), the primary seal shall completely cover the annular space between the edge of the floating roof and tank wall. The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in 40 CFR 60.113b(b)(4). The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. Subpart Kb. [40 CFR 60.112b(a)(2)]

140 Seal gap area & width monitored by measurement at the regulation's specified frequency. Using the procedures in 40 CFR 60.113b(b)(2) determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel during the hydrostatic testing of the vessel or within 60 days of the initial fill with VOL and at least once every 5 years thereafter. Subpart Kb. [40 CFR 60.113b(b)(1)(i)]
Which Months: All Year Statistical Basis: None specified

141 Seal gap area & width monitored by measurement at the regulation's specified frequency. Using the procedures in 40 CFR 60.113b(b)(2) determine the gap areas and maximum gap widths between the secondary seal and the wall of the storage vessel within 60 days of the initial fill with VOL and at least once per year thereafter. Subpart Kb. [40 CFR 60.113b(b)(1)(ii)]
Which Months: All Year Statistical Basis: None specified

142 Add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in 40 CFR 60.113b(b)(4). Subpart Kb. [40 CFR 60.113b(b)(3)]

143 Seal gap area <= 212 cm^2/m of tank diameter (accumulated area) for gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(i)]
Which Months: All Year Statistical Basis: None specified

144 Seal gap width <= 3.81 cm for the width of any portion of any gap between the tank wall and the mechanical shoe or liquid-mounted primary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(i)]
Which Months: All Year Statistical Basis: None specified

145 One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61 cm above the stored liquid surface. Subpart Kb. [40 CFR 60.113b(b)(4)(i)(A)]

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146 There are to be no holes, tears, or other openings in the shoe, primary seal fabric, or seal envelope. Subpart Kb. [40 CFR 60.113b(b)(4)(i)(B)]

147 Install the secondary seal above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in 60.113b(b)(2)(iii). Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(A)]

148 Seal gap area <= 21.2 cm^2/m of tank diameter (accumulated area) for gaps between the tank wall and the secondary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(B)]
Which Months: All Year Statistical Basis: None specified

149 Seal gap width <= 1.27 cm for the width of any portion of any gap between the tank wall and the secondary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(B)]
Which Months: All Year Statistical Basis: None specified

150 There are to be no holes, tears, or other openings in the secondary seal or seal fabric. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(C)]

151 Make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in 40 CFR 60.113b(b)(4) (i) and (ii) except as specified in 40 CFR 60.113b(b)(4)(iii). Subpart Kb. [40 CFR 60.113b(b)(4)]

152 Submit notification: Due at least 30 days in advance of any gap measurements required by 40 CFR 60.113b(b)(1) to afford DEQ the opportunity to have an observer present. Subpart Kb. [40 CFR 60.113b(b)(5)]

153 If the external floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with VOL. Subpart Kb. [40 CFR 60.113b(b)(6)(i)]

154 Submit notification in writing: Due at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by 40 CFR 60.113b(6) to afford DEQ an opportunity to inspect the storage vessel prior to refilling. If the inspection required by paragraph 40 CFR 60.113b(b)(6) is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, notify DEQ at least 7 days prior to the refilling of the storage vessel. Notify by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, submit notification in writing including the written documentation and send by express mail so that it is received by DEQ at least 7 days prior to the refilling. Subpart Kb. [40 CFR 60.113b(b)(6)(ii)]

155 Tank roof and seals monitored by visual inspection/determination at the regulation's specified frequency. Inspect the external floating roof, the primary seal, the secondary seal, and fittings each time the storage vessel is emptied and degassed. Subpart Kb. [40 CFR 60.113b(b)(6)],
Which Months: All Year Statistical Basis: None specified

156 Submit a report: Due to DEQ as an attachment to the notification required by 40 CFR 60.7(a)(3). This report shall describe the control equipment and certify that the control equipment meets the specifications of 40 CFR 60.112b(a)(2) and 60.113b(b)(2), (b)(3), and (b)(4). Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(1)]

157 Submit a report: Due to DEQ within 60 days of performing the seal gap measurements required by 40 CFR 60.113b(b)(1). The report shall contain: 1) the date of measurement, 2) the raw data obtained in the measurement, 3) the calculations described in 40 CFR 60.113b(b)(2) and (b)(3). Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(2)]

158 Gap measurement(s) recordkeeping by electronic or hard copy upon each occurrence of gap measurement performance, as required by 40 CFR 60.113b(b). Each record shall identify the storage vessel in which the measurement was performed and shall contain: 1) the date of measurement, 2) the raw data obtained in the measurement, 3) the calculations described in 40 CFR 60.113b(b)(2) and (b)(3). Keep copies of all records for at least two years. Subpart Kb. [40 CFR 60.115b(b)(3)]

159 Submit a report: Due to DEQ within 30 days after each seal gap measurement that detects gaps exceeding the limitations specified by 40 CFR 60.113b(b)(4). The report will identify the vessel and contain the information specified in 40 CFR 60.115b(b)(2) and the date the vessel was emptied or the repairs made and date of repair. Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(4)]

160 VOL storage data recordkeeping by electronic or hard copy continuously. Records consist of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period. Keep copies of all records for at least two years. Subpart Kb. [40 CFR 60.116b(c)]

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161 Equip with a submerged fill pipe. [LAC 33:III.2103.B]

162 Seal closure devices required in LAC 33:III.2103.D shall have no visible holes, tears, or other openings in the seals or seal fabric. [LAC 33:III.2103.D.2.a]

163 Seal closure devices required in LAC 33:III.2103.D shall be intact and uniformly in place around the circumference of the floating roof and the tank wall. [LAC 33:III.2103.D.2.b]

164 Seal gap area <= 1 in^2/ft of tank diameter (6.5 cm2/0.3 m), for gaps between the secondary seal and tank wall that exceed 1/8 inch (0.32 cm) in width. [LAC 33:III.2103.D.2.c]
Which Months: All Year Statistical Basis: None specified

165 Seal gap area <= 10 in^2/ft of tank diameter (65 cm2/0.3 m), for gaps between the primary seal and tank wall that exceed 1/8 inch (0.32 cm) in width. [LAC 33:III.2103.D.2.d]
Which Months: All Year Statistical Basis: None specified

166 Secondary Seal or closure mechanism monitored by visual inspection/determination semiannually. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

167 Secondary seals: Seal gap area & width monitored by measurement annually at any tank level, provided the roof is off its legs. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

168 Primary seals: Seal gap area & width monitored by measurement once every five years at any tank level, provided the roof is off its legs. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

169 Equipment/operational data recordkeeping by electronic or hard copy upon occurrence of event. Keep records of conditions that are not up to the standards described in LAC 33:III.2103.D.2, and the date(s) that the standards are not met. Notify the administrative authority within seven days of noncompliance with LAC 33:III.2103.D.2. [LAC 33:III.2103.D.2.e]

170 Initiate repairs of seals within seven working days of recognition of defective conditions by ordering appropriate parts, to avoid noncompliance with LAC 33:III.2103. Complete repairs within three months of the ordering of the repair parts. [LAC 33:III.2103.D.2.e]

171 Provide all openings in the external floating roof (except for automatic bleeder vents, rim space vent, and leg sleeves) with a projection below the liquid surface. Equip each opening in the roof (except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves) with a cover, seal or lid that is to be maintained in a closed position at all times except when the device is in actual use. Keep automatic bleeder vents closed at all times except when the roof is being floated off the roof leg supports. Set rim vents to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Equip any emergency roof drain with a slotted membrane fabric cover or equivalent cover that covers at least 90 percent of the opening. [LAC 33:III.2103.D.3]

172 Equip with an external floating roof consisting of a pontoon type roof, double deck type roof, or external floating cover which will rest or float on the surface of the liquid contents and is equipped with a primary closure seal to close the space between the roof edge and tank wall and a continuous secondary seal (a rim mounted secondary) extending from the floating roof to the tank wall. [LAC 33:III.2103.D]

173 Determine compliance with LAC 33:III.2103.D.2 and 4 using the methods in LAC 33:III.2103.H.1. [LAC 33:III.2103.H.1]

174 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. [LAC 33:III.2103.H.3]

175 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

176 Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, equip each opening in the roof with a gasketed cover, seal, or lid and maintain in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Close automatic bleeder vents at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. Set rim vents to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting. Equip automatic bleeder vents and rim space vents with gaskets. Provide each emergency roof drain with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening. Subpart Kb. [40 CFR 60.112b(a)(2)(ii)]

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177 Equip with an external floating roof consisting of a pontoon-type or double-deck type cover that rests on the liquid surface in a vessel with no fixed roof. Equip with a closure device between the wall of the storage vessel and the roof edge. The closure device consists of two seals, secondary above the primary. The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in 40 CFR 60.113b(b)(4), the primary seal shall completely cover the annular space between the edge of the floating roof and tank wall. The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in 40 CFR 60.113b(b)(4). The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. Subpart Kb. [40 CFR 60.112b(a)(2)]

178 Seal gap area & width monitored by measurement at the regulation's specified frequency. Using the procedures in 40 CFR 60.113b(b)(2) determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel during the hydrostatic testing of the vessel or within 60 days of the initial fill with VOL and at least once every 5 years thereafter. Subpart Kb. [40 CFR 60.113b(b)(1)(i)]
Which Months: All Year Statistical Basis: None specified

179 Seal gap area & width monitored by measurement at the regulation's specified frequency. Using the procedures in 40 CFR 60.113b(b)(2) determine the gap areas and maximum gap widths between the secondary seal and the wall of the storage vessel within 60 days of the initial fill with VOL and at least once per year thereafter. Subpart Kb. [40 CFR 60.113b(b)(1)(ii)]
Which Months: All Year Statistical Basis: None specified

180 Add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in 40 CFR 60.113b(b)(4). Subpart Kb. [40 CFR 60.113b(b)(3)]

181 Seal gap area <= 212 cm^2/m of tank diameter (accumulated area) for gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(i)]
Which Months: All Year Statistical Basis: None specified

182 Seal gap width <= 3.81 cm for the width of any portion of any gap between the tank wall and the mechanical shoe or liquid-mounted primary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(i)]
Which Months: All Year Statistical Basis: None specified

183 One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61 cm above the stored liquid surface. Subpart Kb. [40 CFR 60.113b(b)(4)(i)(A)]

184 There are to be no holes, tears, or other openings in the shoe, primary seal fabric, or seal envelope. Subpart Kb. [40 CFR 60.113b(b)(4)(i)(B)]

185 Install the secondary seal above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in 60.113b(b)(2)(iii). Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(A)]

186 Seal gap area <= 21.2 cm^2/m of tank diameter (accumulated area) for gaps between the tank wall and the secondary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(B)]
Which Months: All Year Statistical Basis: None specified

187 Seal gap width <= 1.27 cm for the width of any portion of any gap between the tank wall and the secondary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(B)]
Which Months: All Year Statistical Basis: None specified

188 There are to be no holes, tears, or other openings in the secondary seal or seal fabric. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(C)]

189 Make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in 40 CFR 60.113b(b)(4) (i) and (ii) except as specified in 40 CFR 60.113b(b)(4)(iii). Subpart Kb. [40 CFR 60.113b(b)(4)]

190 Submit notification: Due at least 30 days in advance of any gap measurements required by 40 CFR 60.113b(b)(1) to afford DEQ the opportunity to have an observer present. Subpart Kb. [40 CFR 60.113b(b)(5)]

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191 If the external floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with VOL. Subpart Kb. [40 CFR 60.113b(b)(6)(i)]

192 Submit notification in writing: Due at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by 40 CFR 60.113b(6) to afford DEQ an opportunity to inspect the storage vessel prior to refilling. If the inspection required by paragraph 40 CFR 60.113b(b)(6) is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, notify DEQ at least 7 days prior to the refilling of the storage vessel. Notify by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, submit notification in writing including the written documentation and send by express mail so that it is received by DEQ at least 7 days prior to the refilling. Subpart Kb. [40 CFR 60.113b(b)(6)(ii)]

193 Tank roof and seals monitored by visual inspection/determination at the regulation's specified frequency. Inspect the external floating roof, the primary seal, the secondary seal, and fittings each time the storage vessel is emptied and degassed. Subpart Kb. [40 CFR 60.113b(b)(6)]
Which Months: All Year Statistical Basis: None specified

194 Submit a report: Due to DEQ as an attachment to the notification required by 40 CFR 60.7(a)(3). This report shall describe the control equipment and certify that the control equipment meets the specifications of 40 CFR 60.112b(a)(2) and 60.113b(b)(2), (b)(3), and (b)(4). Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(1)]

195 Submit a report: Due to DEQ within 60 days of performing the seal gap measurements required by 40 CFR 60.113b(b)(1). The report shall contain: 1) the date of measurement, 2) the raw data obtained in the measurement, 3) the calculations described in 40 CFR 60.113b(b)(2) and (b)(3). Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(2)]

196 Gap measurement(s) recordkeeping by electronic or hard copy upon each occurrence of gap measurement performance, as required by 40 CFR 60.113b(b). Each record shall identify the storage vessel in which the measurement was performed and shall contain: 1) the date of measurement, 2) the raw data obtained in the measurement, 3) the calculations described in 40 CFR 60.113b(b)(2) and (b)(3). Keep copies of all records for at least two years. Subpart Kb. [40 CFR 60.115b(b)(3)]

197 Submit a report: Due to DEQ within 30 days after each seal gap measurement that detects gaps exceeding the limitations specified by 40 CFR 60.113b(b)(4). The report will identify the vessel and contain the information specified in 40 CFR 60.115b(b)(2) and the date the vessel was emptied or the repairs made and date of repair. Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(4)]

198 VOL storage data recordkeeping by electronic or hard copy continuously. Records consist of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period. Keep copies of all records for at least two years. Subpart Kb. [40 CFR 60.116b(c)]

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199 Equip with a submerged fill pipe. [LAC 33:III.2103.B]

200 Seal closure devices required in LAC 33:III.2103.D shall have no visible holes, tears, or other openings in the seals or seal fabric. [LAC 33:III.2103.D.2.a]

201 Seal closure devices required in LAC 33:III.2103.D shall be intact and uniformly in place around the circumference of the floating roof and the tank wall. [LAC 33:III.2103.D.2.b]

202 Seal gap area <= 1 in^2/ft of tank diameter (6.5 cm2/0.3 m), for gaps between the secondary seal and tank wall that exceed 1/8 inch (0.32 cm) in width. [LAC 33:III.2103.D.2.c]
Which Months: All Year Statistical Basis: None specified

203 Seal gap area <= 10 in^2/ft of tank diameter (65 cm2/0.3 m), for gaps between the primary seal and tank wall that exceed 1/8 inch (0.32 cm) in width. [LAC 33:III.2103.D.2.d]
Which Months: All Year Statistical Basis: None specified

204 Secondary Seal or closure mechanism monitored by visual inspection/determination semiannually. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

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205 Secondary seals: Seal gap area & width monitored by measurement annually at any tank level, provided the roof is off its legs. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

206 Primary seals: Seal gap area & width monitored by measurement once every five years at any tank level, provided the roof is off its legs. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

207 Equipment/operational data recordkeeping by electronic or hard copy upon occurrence of event. Keep records of conditions that are not up to the standards described in LAC 33:III.2103.D.2, and the date(s) that the standards are not met. Notify the administrative authority within seven days of noncompliance with LAC 33:III.2103.D.2. [LAC 33:III.2103.D.2.e]

208 Initiate repairs of seals within seven working days of recognition of defective conditions by ordering appropriate parts, to avoid noncompliance with LAC 33:III.2103. Complete repairs within three months of the ordering of the repair parts. [LAC 33:III.2103.D.2.e]

209 Provide all openings in the external floating roof (except for automatic bleeder vents, rim space vent, and leg sleeves) with a projection below the liquid surface. Equip each opening in the roof (except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves) with a cover, seal or lid that is to be maintained in a closed position at all times except when the device is in actual use. Keep automatic bleeder vents closed at all times except when the roof is being floated off the roof leg supports. Set rim vents to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Equip any emergency roof drain with a slotted membrane fabric cover or equivalent cover that covers at least 90 percent of the opening. [LAC 33:III.2103.D.3]

210 Equip with an external floating roof consisting of a pontoon type roof, double deck type roof, or external floating cover which will rest or float on the surface of the liquid contents and is equipped with a primary closure seal to close the space between the roof edge and tank wall and a continuous secondary seal (a rim mounted secondary) extending from the floating roof to the tank wall. [LAC 33:III.2103.D]

211 Determine compliance with LAC 33:III.2103.D.2 and 4 using the methods in LAC 33:III.2103.H.1. [LAC 33:III.2103.H.1]

212 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. [LAC 33:III.2103.H.3]

213 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

214 Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, equip each opening in the roof with a gasketed cover, seal, or lid and maintain in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Close automatic bleeder vents at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. Set rim vents to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting. Equip automatic bleeder vents and rim space vents with gaskets. Provide each emergency roof drain with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening. Subpart Kb. [40 CFR 60.112b(a)(2)(ii)]

215 Equip with an external floating roof consisting of a pontoon-type or double-deck type cover that rests on the liquid surface in a vessel with no fixed roof. Equip with a closure device between the wall of the storage vessel and the roof edge. The closure device consists of two seals, secondary above the primary. The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in 40 CFR 60.113b(b)(4), the primary seal shall completely cover the annular space between the edge of the floating roof and tank wall. The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in 40 CFR 60.113b(b)(4). The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. Subpart Kb. [40 CFR 60.112b(a)(2)]

216 Seal gap area & width monitored by measurement at the regulation's specified frequency. Using the procedures in 40 CFR 60.113b(b)(2) determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel during the hydrostatic testing of the vessel or within 60 days of the initial fill with VOL and at least once every 5 years thereafter. Subpart Kb. [40 CFR 60.113b(b)(1)(i)]
Which Months: All Year Statistical Basis: None specified

EQT030 4-99 Tank 6406 (Clovelly Dome)

217 Seal gap area & width monitored by measurement at the regulation's specified frequency. Using the procedures in 40 CFR 60.113b(b)(2) determine the gap areas and maximum gap widths between the secondary seal and the wall of the storage vessel within 60 days of the initial fill with VOL and at least once per year thereafter. Subpart Kb. [40 CFR 60.113b(b)(1)(ii)]
Which Months: All Year Statistical Basis: None specified

218 Add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in 40 CFR 60.113b(b)(4). Subpart Kb. [40 CFR 60.113b(b)(3)]

219 Seal gap area <= 212 cm^2/m of tank diameter (accumulated area) for gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(i)]
Which Months: All Year Statistical Basis: None specified

220 Seal gap width <= 3.81 cm for the width of any portion of any gap between the tank wall and the mechanical shoe or liquid-mounted primary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(i)]
Which Months: All Year Statistical Basis: None specified

221 One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61 cm above the stored liquid surface. Subpart Kb. [40 CFR 60.113b(b)(4)(i)(A)]

222 There are to be no holes, tears, or other openings in the shoe, primary seal fabric, or seal envelope. Subpart Kb. [40 CFR 60.113b(b)(4)(i)(B)]

223 Install the secondary seal above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in 60.113b(b)(2)(iii). Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(A)]

224 Seal gap area <= 21.2 cm^2/m of tank diameter (accumulated area) for gaps between the tank wall and the secondary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(B)]
Which Months: All Year Statistical Basis: None specified

225 Seal gap width <= 1.27 cm for the width of any portion of any gap between the tank wall and the secondary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(B)]
Which Months: All Year Statistical Basis: None specified

226 There are to be no holes, tears, or other openings in the secondary seal or seal fabric. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(C)]

227 Make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in 40 CFR 60.113b(b)(4) (i) and (ii) except as specified in 40 CFR 60.113b(b)(4)(iii). Subpart Kb. [40 CFR 60.113b(b)(4)]

228 Submit notification: Due at least 30 days in advance of any gap measurements required by 40 CFR 60.113b(b)(1) to afford DEQ the opportunity to have an observer present. Subpart Kb. [40 CFR 60.113b(b)(5)]

229 If the external floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with VOL. Subpart Kb. [40 CFR 60.113b(b)(6)(i)]

230 Submit notification in writing: Due at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by 40 CFR 60.113b(6) to afford DEQ an opportunity to inspect the storage vessel prior to refilling. If the inspection required by paragraph 40 CFR 60.113b(b)(6) is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, notify DEQ at least 7 days prior to the refilling of the storage vessel. Notify by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, submit notification in writing including the written documentation and send by express mail so that it is received by DEQ at least 7 days prior to the refilling. Subpart Kb. [40 CFR 60.113b(b)(6)(ii)]

231 Tank roof and seals monitored by visual inspection/determination at the regulation's specified frequency. Inspect the external floating roof, the primary seal, the secondary seal, and fittings each time the storage vessel is emptied and degassed. Subpart Kb. [40 CFR 60.113b(b)(6)]
Which Months: All Year Statistical Basis: None specified

EQT030 4-99 Tank 6406 (Clovelly Dome)

232 Submit a report: Due to DEQ as an attachment to the notification required by 40 CFR 60.7(a)(3). This report shall describe the control equipment and certify that the control equipment meets the specifications of 40 CFR 60.112b(a)(2) and 60.113b(b)(2), (b)(3), and (b)(4). Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(1)]

233 Submit a report: Due to DEQ within 60 days of performing the seal gap measurements required by 40 CFR 60.113b(b)(1). The report shall contain: 1) the date of measurement, 2) the raw data obtained in the measurement, 3) the calculations described in 40 CFR 60.113b(b)(2) and (b)(3). Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(2)]

234 Gap measurement(s) recordkeeping by electronic or hard copy upon each occurrence of gap measurement performance, as required by 40 CFR 60.113b(b). Each record shall identify the storage vessel in which the measurement was performed and shall contain: 1) the date of measurement, 2) the raw data obtained in the measurement, 3) the calculations described in 40 CFR 60.113b(b)(2) and (b)(3). Keep copies of all records for at least two years. Subpart Kb. [40 CFR 60.115b(b)(3)]

235 Submit a report: Due to DEQ within 30 days after each seal gap measurement that detects gaps exceeding the limitations specified by 40 CFR 60.113b(b)(4). The report will identify the vessel and contain the information specified in 40 CFR 60.115b(b)(2) and the date the vessel was emptied or the repairs made and date of repair. Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(4)]

236 VOL storage data recordkeeping by electronic or hard copy continuously. Records consist of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period. Keep copies of all records for at least two years. Subpart Kb. [40 CFR 60.116b(c)]

EQT031 6-02 Tank 6409 (Clovelly Dome)

237 Equip with a submerged fill pipe. [LAC 33:III.2103.B]

238 Seal closure devices required in LAC 33:III.2103.D shall have no visible holes, tears, or other openings in the seals or seal fabric. [LAC 33:III.2103.D.2.a]

239 Seal closure devices required in LAC 33:III.2103.D shall be intact and uniformly in place around the circumference of the floating roof and the tank wall. [LAC 33:III.2103.D.2.b]

240 Seal gap area <= 1 in^2/ft of tank diameter (6.5 cm2/0.3 m), for gaps between the secondary seal and tank wall that exceed 1/8 inch (0.32 cm) in width. [LAC 33:III.2103.D.2.c]
Which Months: All Year Statistical Basis: None specified

241 Seal gap area <= 10 in^2/ft of tank diameter (65 cm2/0.3 m), for gaps between the primary seal and tank wall that exceed 1/8 inch (0.32 cm) in width. [LAC 33:III.2103.D.2.d]
Which Months: All Year Statistical Basis: None specified

242 Secondary Seal or closure mechanism monitored by visual inspection/determination semiannually. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

243 Secondary seals: Seal gap area & width monitored by measurement annually at any tank level, provided the roof is off its legs. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

244 Primary seals: Seal gap area & width monitored by measurement once every five years at any tank level, provided the roof is off its legs. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

245 Equipment/operational data recordkeeping by electronic or hard copy upon occurrence of event. Keep records of conditions that are not up to the standards described in LAC 33:III.2103.D.2, and the date(s) that the standards are not met. Notify the administrative authority within seven days of noncompliance with LAC 33:III.2103.D.2. [LAC 33:III.2103.D.2.e]

246 Initiate repairs of seals within seven working days of recognition of defective conditions by ordering appropriate parts, to avoid noncompliance with LAC 33:III.2103. Complete repairs within three months of the ordering of the repair parts. [LAC 33:III.2103.D.2.e]

EQT031 6-02 Tank 6409 (Clovelly Dome)

247 Provide all openings in the external floating roof (except for automatic bleeder vents, rim space vent, and leg sleeves) with a projection below the liquid surface. Equip each opening in the roof (except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves) with a cover, seal or lid that is to be maintained in a closed position at all times except when the device is in actual use. Keep automatic bleeder vents closed at all times except when the roof is being floated off the roof leg supports. Set rim vents to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Equip any emergency roof drain with a slotted membrane fabric cover or equivalent cover that covers at least 90 percent of the opening. [LAC 33:III.2103.D.3]

248 Equip with an external floating roof consisting of a pontoon type roof, double deck type roof, or external floating cover which will rest or float on the surface of the liquid contents and is equipped with a primary closure seal to close the space between the roof edge and tank wall and a continuous secondary seal (a rim mounted secondary) extending from the floating roof to the tank wall. [LAC 33:III.2103.D]

249 Determine compliance with LAC 33:III.2103.D.2 and 4 using the methods in LAC 33:III.2103.H.1. [LAC 33:III.2103.H.1]

250 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. [LAC 33:III.2103.H.3]

251 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

252 Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, equip each opening in the roof with a gasketed cover, seal, or lid and maintain in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Close automatic bleeder vents at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. Set rim vents to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting. Equip automatic bleeder vents and rim space vents with gaskets. Provide each emergency roof drain with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening. Subpart Kb. [40 CFR 60.112b(a)(2)(ii)]

253 Equip with an external floating roof consisting of a pontoon-type or double-deck type cover that rests on the liquid surface in a vessel with no fixed roof. Equip with a closure device between the wall of the storage vessel and the roof edge. The closure device consists of two seals, secondary above the primary. The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in 40 CFR 60.113b(b)(4), the primary seal shall completely cover the annular space between the edge of the floating roof and tank wall. The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in 40 CFR 60.113b(b)(4). The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. Subpart Kb. [40 CFR 60.112b(a)(2)]

254 Seal gap area & width monitored by measurement at the regulation's specified frequency. Using the procedures in 40 CFR 60.113b(b)(2) determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel during the hydrostatic testing of the vessel or within 60 days of the initial fill with VOL and at least once every 5 years thereafter. Subpart Kb. [40 CFR 60.113b(b)(1)(i)]
Which Months: All Year Statistical Basis: None specified

255 Seal gap area & width monitored by measurement at the regulation's specified frequency. Using the procedures in 40 CFR 60.113b(b)(2) determine the gap areas and maximum gap widths between the secondary seal and the wall of the storage vessel within 60 days of the initial fill with VOL and at least once per year thereafter. Subpart Kb. [40 CFR 60.113b(b)(1)(ii)]
Which Months: All Year Statistical Basis: None specified

256 Add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in 40 CFR 60.113b(b)(4). Subpart Kb. [40 CFR 60.113b(b)(3)]

257 Seal gap area <= 212 cm^2/m of tank diameter (accumulated area) for gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(i)]
Which Months: All Year Statistical Basis: None specified

EQT031 6-02 Tank 6409 (Clovelly Dome)

258 Seal gap width <= 3.81 cm for the width of any portion of any gap between the tank wall and the mechanical shoe or liquid-mounted primary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(i)]
Which Months: All Year Statistical Basis: None specified

259 One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61 cm above the stored liquid surface. Subpart Kb. [40 CFR 60.113b(b)(4)(i)(A)]

260 There are to be no holes, tears, or other openings in the shoe, primary seal fabric, or seal envelope. Subpart Kb. [40 CFR 60.113b(b)(4)(i)(B)]

261 Install the secondary seal above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in 60.113b(b)(2)(iii). Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(A)]

262 Seal gap area <= 21.2 cm^2/m of tank diameter (accumulated area) for gaps between the tank wall and the secondary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(B)]
Which Months: All Year Statistical Basis: None specified

263 Seal gap width <= 1.27 cm for the width of any portion of any gap between the tank wall and the secondary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(B)]
Which Months: All Year Statistical Basis: None specified

264 There are to be no holes, tears, or other openings in the secondary seal or seal fabric. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(C)]

265 Make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in 40 CFR 60.113b(b)(4) (i) and (ii) except as specified in 40 CFR 60.113b(b)(4)(iii). Subpart Kb. [40 CFR 60.113b(b)(4)]

266 Submit notification: Due at least 30 days in advance of any gap measurements required by 40 CFR 60.113b(b)(1) to afford DEQ the opportunity to have an observer present. Subpart Kb. [40 CFR 60.113b(b)(5)]

267 If the external floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with VOL. Subpart Kb. [40 CFR 60.113b(b)(6)(i)]

268 Submit notification in writing: Due at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by 40 CFR 60.113b(6) to afford DEQ an opportunity to inspect the storage vessel prior to refilling. If the inspection required by paragraph 40 CFR 60.113b(b)(6) is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, notify DEQ at least 7 days prior to the refilling of the storage vessel. Notify by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, submit notification in writing including the written documentation and send by express mail so that it is received by DEQ at least 7 days prior to the refilling. Subpart Kb. [40 CFR 60.113b(b)(6)(ii)]

269 Tank roof and seals monitored by visual inspection/determination at the regulation's specified frequency. Inspect the external floating roof, the primary seal, the secondary seal, and fittings each time the storage vessel is emptied and degassed. Subpart Kb. [40 CFR 60.113b(b)(6)]
Which Months: All Year Statistical Basis: None specified

270 Submit a report: Due to DEQ as an attachment to the notification required by 40 CFR 60.7(a)(3). This report shall describe the control equipment and certify that the control equipment meets the specifications of 40 CFR 60.112b(a)(2) and 60.113b(b)(2), (b)(3), and (b)(4). Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(1)]

271 Submit a report: Due to DEQ within 60 days of performing the seal gap measurements required by 40 CFR 60.113b(b)(1). The report shall contain: 1) the date of measurement, 2) the raw data obtained in the measurement, 3) the calculations described in 40 CFR 60.113b(b)(2) and (b)(3). Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(2)]

272 Gap measurement(s) recordkeeping by electronic or hard copy upon each occurrence of gap measurement performance, as required by 40 CFR 60.113b(b). Each record shall identify the storage vessel in which the measurement was performed and shall contain: 1) the date of measurement, 2) the raw data obtained in the measurement, 3) the calculations described in 40 CFR 60.113b(b)(2) and (b)(3). Keep copies of all records for at least two years. Subpart Kb. [40 CFR 60.115b(b)(3)]

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273 Submit a report: Due to DEQ within 30 days after each seal gap measurement that detects gaps exceeding the limitations specified by 40 CFR 60.113b(b)(4). The report will identify the vessel and contain the information specified in 40 CFR 60.115b(b)(2) and the date the vessel was emptied or the repairs made and date of repair. Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(4)]

274 VOL storage data recordkeeping by electronic or hard copy continuously. Records consist of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period. Keep copies of all records for at least two years. Subpart Kb. [40 CFR 60.116b(c)]

EQT032 7-02 Tank 6410 (Clovelly Dome)

275 Equip with a submerged fill pipe. [LAC 33:III.2103.B]

276 Seal closure devices required in LAC 33:III.2103.D shall have no visible holes, tears, or other openings in the seals or seal fabric. [LAC 33:III.2103.D.2.a]

277 Seal closure devices required in LAC 33:III.2103.D shall be intact and uniformly in place around the circumference of the floating roof and the tank wall. [LAC 33:III.2103.D.2.b]

278 Seal gap area <= 1 in^2/ft of tank diameter (6.5 cm2/0.3 m), for gaps between the secondary seal and tank wall that exceed 1/8 inch (0.32 cm) in width. [LAC 33:III.2103.D.2.c]
Which Months: All Year Statistical Basis: None specified

279 Seal gap area <= 10 in^2/ft of tank diameter (65 cm2/0.3 m), for gaps between the primary seal and tank wall that exceed 1/8 inch (0.32 cm) in width. [LAC 33:III.2103.D.2.d]
Which Months: All Year Statistical Basis: None specified

280 Secondary Seal or closure mechanism monitored by visual inspection/determination semiannually. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

281 Secondary seals: Seal gap area & width monitored by measurement annually at any tank level, provided the roof is off its legs. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

282 Primary seals: Seal gap area & width monitored by measurement once every five years at any tank level, provided the roof is off its legs. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

283 Equipment/operational data recordkeeping by electronic or hard copy upon occurrence of event. Keep records of conditions that are not up to the standards described in LAC 33:III.2103.D.2, and the date(s) that the standards are not met. Notify the administrative authority within seven days of noncompliance with LAC 33:III.2103.D.2. [LAC 33:III.2103.D.2.e]

284 Initiate repairs of seals within seven working days of recognition of defective conditions by ordering appropriate parts, to avoid noncompliance with LAC 33:III.2103. Complete repairs within three months of the ordering of the repair parts. [LAC 33:III.2103.D.2.e]

285 Provide all openings in the external floating roof (except for automatic bleeder vents, rim space vent, and leg sleeves) with a projection below the liquid surface. Equip each opening in the roof (except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves) with a cover, seal or lid that is to be maintained in a closed position at all times except when the device is in actual use. Keep automatic bleeder vents closed at all times except when the roof is being floated off the roof leg supports. Set rim vents to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Equip any emergency roof drain with a slotted membrane fabric cover or equivalent cover that covers at least 90 percent of the opening. [LAC 33:III.2103.D.3]

286 Equip with an external floating roof consisting of a pontoon type roof, double deck type roof, or external floating cover which will rest or float on the surface of the liquid contents and is equipped with a primary closure seal to close the space between the roof edge and tank wall and a continuous secondary seal (a rim mounted secondary) extending from the floating roof to the tank wall. [LAC 33:III.2103.D]

287 Determine compliance with LAC 33:III.2103.D.2 and 4 using the methods in LAC 33:III.2103.H.1. [LAC 33:III.2103.H.1]

288 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. [LAC 33:III.2103.H.3]

289 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

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290 Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, equip each opening in the roof with a gasketed cover, seal, or lid and maintain in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Close automatic bleeder vents at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. Set rim vents to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting. Equip automatic bleeder vents and rim space vents with gaskets. Provide each emergency roof drain with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening. Subpart Kb. [40 CFR 60.112b(a)(2)(ii)]

291 Equip with an external floating roof consisting of a pontoon-type or double-deck type cover that rests on the liquid surface in a vessel with no fixed roof. Equip with a closure device between the wall of the storage vessel and the roof edge. The closure device consists of two seals, secondary above the primary. The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in 40 CFR 60.113b(b)(4), the primary seal shall completely cover the annular space between the edge of the floating roof and tank wall. The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in 40 CFR 60.113b(b)(4). The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. Subpart Kb. [40 CFR 60.112b(a)(2)]

292 Seal gap area & width monitored by measurement at the regulation's specified frequency. Using the procedures in 40 CFR 60.113b(b)(2) determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel during the hydrostatic testing of the vessel or within 60 days of the initial fill with VOL and at least once every 5 years thereafter. Subpart Kb. [40 CFR 60.113b(b)(1)(i)]
Which Months: All Year Statistical Basis: None specified

293 Seal gap area & width monitored by measurement at the regulation's specified frequency. Using the procedures in 40 CFR 60.113b(b)(2) determine the gap areas and maximum gap widths between the secondary seal and the wall of the storage vessel within 60 days of the initial fill with VOL and at least once per year thereafter. Subpart Kb. [40 CFR 60.113b(b)(1)(ii)]
Which Months: All Year Statistical Basis: None specified

294 Add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in 40 CFR 60.113b(b)(4). Subpart Kb. [40 CFR 60.113b(b)(3)]

295 Seal gap area <= 212 cm^2/m of tank diameter (accumulated area) for gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(i)]
Which Months: All Year Statistical Basis: None specified

296 Seal gap width <= 3.81 cm for the width of any portion of any gap between the tank wall and the mechanical shoe or liquid-mounted primary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(i)]
Which Months: All Year Statistical Basis: None specified

297 One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61 cm above the stored liquid surface. Subpart Kb. [40 CFR 60.113b(b)(4)(i)(A)]

298 There are to be no holes, tears, or other openings in the shoe, primary seal fabric, or seal envelope. Subpart Kb. [40 CFR 60.113b(b)(4)(i)(B)]

299 Install the secondary seal above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in 60.113b(b)(2)(iii). Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(A)]

300 Seal gap area <= 21.2 cm^2/m of tank diameter (accumulated area) for gaps between the tank wall and the secondary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(B)]
Which Months: All Year Statistical Basis: None specified

301 Seal gap width <= 1.27 cm for the width of any portion of any gap between the tank wall and the secondary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(B)]
Which Months: All Year Statistical Basis: None specified

302 There are to be no holes, tears, or other openings in the secondary seal or seal fabric. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(C)]

EQT032 7-02 Tank 6410 (Clovelly Dome)

303 Make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in 40 CFR 60.113b(b)(4) (i) and (ii) except as specified in 40 CFR 60.113b(b)(4)(iii). Subpart Kb. [40 CFR 60.113b(b)(4)]

304 Submit notification: Due at least 30 days in advance of any gap measurements required by 40 CFR 60.113b(b)(1) to afford DEQ the opportunity to have an observer present. Subpart Kb. [40 CFR 60.113b(b)(5)]

305 If the external floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with VOL. Subpart Kb. [40 CFR 60.113b(b)(6)(i)]

306 Submit notification in writing: Due at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by 40 CFR 60.113b(6) to afford DEQ an opportunity to inspect the storage vessel prior to refilling. If the inspection required by paragraph 40 CFR 60.113b(b)(6) is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, notify DEQ at least 7 days prior to the refilling of the storage vessel. Notify by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, submit notification in writing including the written documentation and send by express mail so that it is received by DEQ at least 7 days prior to the refilling. Subpart Kb. [40 CFR 60.113b(b)(6)(ii)]

307 Tank roof and seals monitored by visual inspection/determination at the regulation's specified frequency. Inspect the external floating roof, the primary seal, the secondary seal, and fittings each time the storage vessel is emptied and degassed. Subpart Kb. [40 CFR 60.113b(b)(6)]
Which Months: All Year Statistical Basis: None specified

308 Submit a report: Due to DEQ as an attachment to the notification required by 40 CFR 60.7(a)(3). This report shall describe the control equipment and certify that the control equipment meets the specifications of 40 CFR 60.112b(a)(2) and 60.113b(b)(2), (b)(3), and (b)(4). Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(1)]

309 Submit a report: Due to DEQ within 60 days of performing the seal gap measurements required by 40 CFR 60.113b(b)(1). The report shall contain: 1) the date of measurement, 2) the raw data obtained in the measurement, 3) the calculations described in 40 CFR 60.113b(b)(2) and (b)(3). Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(2)]

310 Gap measurement(s) recordkeeping by electronic or hard copy upon each occurrence of gap measurement performance, as required by 40 CFR 60.113b(b). Each record shall identify the storage vessel in which the measurement was performed and shall contain: 1) the date of measurement, 2) the raw data obtained in the measurement, 3) the calculations described in 40 CFR 60.113b(b)(2) and (b)(3). Keep copies of all records for at least two years. Subpart Kb. [40 CFR 60.115b(b)(3)]

311 Submit a report: Due to DEQ within 30 days after each seal gap measurement that detects gaps exceeding the limitations specified by 40 CFR 60.113b(b)(4). The report will identify the vessel and contain the information specified in 40 CFR 60.115b(b)(2) and the date the vessel was emptied or the repairs made and date of repair. Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(4)]

312 VOL storage data recordkeeping by electronic or hard copy continuously. Records consist of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period. Keep copies of all records for at least two years. Subpart Kb. [40 CFR 60.116b(c)]

EQT033 8-07 Tank 6403 (Clovelly Dome)

313 Equip with a submerged fill pipe. [LAC 33:III.2103.B]

314 Seal closure devices required in LAC 33:III.2103.D shall have no visible holes, tears, or other openings in the seals or seal fabric. [LAC 33:III.2103.D.2.a]

315 Seal closure devices required in LAC 33:III.2103.D shall be intact and uniformly in place around the circumference of the floating roof and the tank wall. [LAC 33:III.2103.D.2.b]

316 Seal gap area <= 1 in^2/ft of tank diameter (6.5 cm2/0.3 m), for gaps between the secondary seal and tank wall that exceed 1/8 inch (0.32 cm) in width. [LAC 33:III.2103.D.2.c]
Which Months: All Year Statistical Basis: None specified

EQT033 8-07 Tank 6403 (Clovelly Dome)

317 Seal gap area <= 10 in^2/ft of tank diameter (65 cm2/0.3 m), for gaps between the primary seal and tank wall that exceed 1/8 inch (0.32 cm) in width. [LAC 33:III.2103.D.2.d]
Which Months: All Year Statistical Basis: None specified

318 Secondary Seal or closure mechanism monitored by visual inspection/determination semiannually. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

319 Secondary seals: Seal gap area & width monitored by measurement annually at any tank level, provided the roof is off its legs. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

320 Primary seals: Seal gap area & width monitored by measurement once every five years at any tank level, provided the roof is off its legs. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

321 Equipment/operational data recordkeeping by electronic or hard copy upon occurrence of event. Keep records of conditions that are not up to the standards described in LAC 33:III.2103.D.2, and the date(s) that the standards are not met. Notify the administrative authority within seven days of noncompliance with LAC 33:III.2103.D.2. [LAC 33:III.2103.D.2.e]

322 Initiate repairs of seals within seven working days of recognition of defective conditions by ordering appropriate parts, to avoid noncompliance with LAC 33:III.2103. Complete repairs within three months of the ordering of the repair parts. [LAC 33:III.2103.D.2.e]

323 Provide all openings in the external floating roof (except for automatic bleeder vents, rim space vent, and leg sleeves) with a projection below the liquid surface. Equip each opening in the roof (except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves) with a cover, seal or lid that is to be maintained in a closed position at all times except when the device is in actual use. Keep automatic bleeder vents closed at all times except when the roof is being floated off the roof leg supports. Set rim vents to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Equip any emergency roof drain with a slotted membrane fabric cover or equivalent cover that covers at least 90 percent of the opening. [LAC 33:III.2103.D.3]

324 Equip with an external floating roof consisting of a pontoon type roof, double deck type roof, or external floating cover which will rest or float on the surface of the liquid contents and is equipped with a primary closure seal to close the space between the roof edge and tank wall and a continuous secondary seal (a rim mounted secondary) extending from the floating roof to the tank wall. [LAC 33:III.2103.D]

325 Determine compliance with LAC 33:III.2103.D.2 and 4 using the methods in LAC 33:III.2103.H.1. [LAC 33:III.2103.H.1]

326 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. [LAC 33:III.2103.H.3]

327 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

328 Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, equip each opening in the roof with a gasketed cover, seal, or lid and maintain in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Close automatic bleeder vents at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. Set rim vents to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting. Equip automatic bleeder vents and rim space vents with gaskets. Provide each emergency roof drain with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening. Subpart Kb. [40 CFR 60.112b(a)(2)(ii)]

329 Equip with an external floating roof consisting of a pontoon-type or double-deck type cover that rests on the liquid surface in a vessel with no fixed roof. Equip with a closure device between the wall of the storage vessel and the roof edge. The closure device consists of two seals, secondary above the primary. The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in 40 CFR 60.113b(b)(4), the primary seal shall completely cover the annular space between the edge of the floating roof and tank wall. The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in 40 CFR 60.113b(b)(4). The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. Subpart Kb. [40 CFR 60.112b(a)(2)]

EQT033 8-07 Tank 6403 (Clovelly Dome)

330 Seal gap area & width monitored by measurement at the regulation's specified frequency. Using the procedures in 40 CFR 60.113b(b)(2) determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel during the hydrostatic testing of the vessel or within 60 days of the initial fill with VOL and at least once every 5 years thereafter. Subpart Kb. [40 CFR 60.113b(b)(1)(i)]
Which Months: All Year Statistical Basis: None specified

331 Seal gap area & width monitored by measurement at the regulation's specified frequency. Using the procedures in 40 CFR 60.113b(b)(2) determine the gap areas and maximum gap widths between the secondary seal and the wall of the storage vessel within 60 days of the initial fill with VOL and at least once per year thereafter. Subpart Kb. [40 CFR 60.113b(b)(1)(ii)]
Which Months: All Year Statistical Basis: None specified

332 Add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in 40 CFR 60.113b(b)(4). Subpart Kb. [40 CFR 60.113b(b)(3)]

333 Seal gap area <= 212 cm^2/m of tank diameter (accumulated area) for gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(i)]
Which Months: All Year Statistical Basis: None specified

334 Seal gap width <= 3.81 cm for the width of any portion of any gap between the tank wall and the mechanical shoe or liquid-mounted primary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(i)]
Which Months: All Year Statistical Basis: None specified

335 One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61 cm above the stored liquid surface. Subpart Kb. [40 CFR 60.113b(b)(4)(i)(A)]

336 There are to be no holes, tears, or other openings in the shoe, primary seal fabric, or seal envelope. Subpart Kb. [40 CFR 60.113b(b)(4)(i)(B)]

337 Install the secondary seal above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in 60.113b(b)(2)(iii). Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(A)]

338 Seal gap area <= 21.2 cm^2/m of tank diameter (accumulated area) for gaps between the tank wall and the secondary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(B)]
Which Months: All Year Statistical Basis: None specified

339 Seal gap width <= 1.27 cm for the width of any portion of any gap between the tank wall and the secondary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(B)]
Which Months: All Year Statistical Basis: None specified

340 There are to be no holes, tears, or other openings in the secondary seal or seal fabric. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(C)]

341 Make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in 40 CFR 60.113b(b)(4) (i) and (ii) except as specified in 40 CFR 60.113b(b)(4)(iii). Subpart Kb. [40 CFR 60.113b(b)(4)]

342 Submit notification: Due at least 30 days in advance of any gap measurements required by 40 CFR 60.113b(b)(1) to afford DEQ the opportunity to have an observer present. Subpart Kb. [40 CFR 60.113b(b)(5)]

343 If the external floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with VOL. Subpart Kb. [40 CFR 60.113b(b)(6)(i)]

344 Submit notification in writing: Due at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by 40 CFR 60.113b(6) to afford DEQ an opportunity to inspect the storage vessel prior to refilling. If the inspection required by paragraph 40 CFR 60.113b(b)(6) is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, notify DEQ at least 7 days prior to the refilling of the storage vessel. Notify by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, submit notification in writing including the written documentation and send by express mail so that it is received by DEQ at least 7 days prior to the refilling. Subpart Kb. [40 CFR 60.113b(b)(6)(ii)]

EQT033 8-07 Tank 6403 (Clovelly Dome)

345 Tank roof and seals monitored by visual inspection/determination at the regulation's specified frequency. Inspect the external floating roof, the primary seal, the secondary seal, and fittings each time the storage vessel is emptied and degassed. Subpart Kb. [40 CFR 60.113b(b)(6)]
Which Months: All Year Statistical Basis: None specified

346 Submit a report: Due to DEQ as an attachment to the notification required by 40 CFR 60.7(a)(3). This report shall describe the control equipment and certify that the control equipment meets the specifications of 40 CFR 60.112b(a)(2) and 60.113b(b)(2), (b)(3), and (b)(4). Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(1)]

347 Submit a report: Due to DEQ within 60 days of performing the seal gap measurements required by 40 CFR 60.113b(b)(1). The report shall contain: 1) the date of measurement, 2) the raw data obtained in the measurement, 3) the calculations described in 40 CFR 60.113b(b)(2) and (b)(3). Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(2)]

348 Gap measurement(s) recordkeeping by electronic or hard copy upon each occurrence of gap measurement performance, as required by 40 CFR 60.113b(b). Each record shall identify the storage vessel in which the measurement was performed and shall contain: 1) the date of measurement, 2) the raw data obtained in the measurement, 3) the calculations described in 40 CFR 60.113b(b)(2) and (b)(3). Keep copies of all records for at least two years. Subpart Kb. [40 CFR 60.115b(b)(3)]

349 Submit a report: Due to DEQ within 30 days after each seal gap measurement that detects gaps exceeding the limitations specified by 40 CFR 60.113b(b)(4). The report will identify the vessel and contain the information specified in 40 CFR 60.115b(b)(2) and the date the vessel was emptied or the repairs made and date of repair. Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(4)]

350 VOL storage data recordkeeping by electronic or hard copy continuously. Records consist of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period. Keep copies of all records for at least two years. Subpart Kb. [40 CFR 60.116b(c)]

EQT034 9-07 Tank 6404 (Clovelly Dome)

351 Equip with a submerged fill pipe. [LAC 33:III.2103.B]

352 Seal closure devices required in LAC 33:III.2103.D shall have no visible holes, tears, or other openings in the seals or seal fabric. [LAC 33:III.2103.D.2.a]

353 Seal closure devices required in LAC 33:III.2103.D shall be intact and uniformly in place around the circumference of the floating roof and the tank wall. [LAC 33:III.2103.D.2.b]

354 Seal gap area <= 1 in^2/ft of tank diameter (6.5 cm2/0.3 m), for gaps between the secondary seal and tank wall that exceed 1/8 inch (0.32 cm) in width. [LAC 33:III.2103.D.2.c]
Which Months: All Year Statistical Basis: None specified

355 Seal gap area <= 10 in^2/ft of tank diameter (65 cm2/0.3 m), for gaps between the primary seal and tank wall that exceed 1/8 inch (0.32 cm) in width. [LAC 33:III.2103.D.2.d]
Which Months: All Year Statistical Basis: None specified

356 Secondary Seal or closure mechanism monitored by visual inspection/determination semiannually. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

357 Secondary seals: Seal gap area & width monitored by measurement annually at any tank level, provided the roof is off its legs. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

358 Primary seals: Seal gap area & width monitored by measurement once every five years at any tank level, provided the roof is off its legs. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

359 Equipment/operational data recordkeeping by electronic or hard copy upon occurrence of event. Keep records of conditions that are not up to the standards described in LAC 33:III.2103.D.2, and the date(s) that the standards are not met. Notify the administrative authority within seven days of noncompliance with LAC 33:III.2103.D.2. [LAC 33:III.2103.D.2.e]

360 Initiate repairs of seals within seven working days of recognition of defective conditions by ordering appropriate parts, to avoid noncompliance with LAC 33:III.2103. Complete repairs within three months of the ordering of the repair parts. [LAC 33:III.2103.D.2.e]

EQT034 9-07 Tank 6404 (Clovelly Dome)

361 Provide all openings in the external floating roof (except for automatic bleeder vents, rim space vent, and leg sleeves) with a projection below the liquid surface. Equip each opening in the roof (except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves) with a cover, seal or lid that is to be maintained in a closed position at all times except when the device is in actual use. Keep automatic bleeder vents closed at all times except when the roof is being floated off the roof leg supports. Set rim vents to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Equip any emergency roof drain with a slotted membrane fabric cover or equivalent cover that covers at least 90 percent of the opening. [LAC 33:III.2103.D.3]

362 Equip with an external floating roof consisting of a pontoon type roof, double deck type roof, or external floating cover which will rest or float on the surface of the liquid contents and is equipped with a primary closure seal to close the space between the roof edge and tank wall and a continuous secondary seal (a rim mounted secondary) extending from the floating roof to the tank wall. [LAC 33:III.2103.D]

363 Determine compliance with LAC 33:III.2103.D.2 and 4 using the methods in LAC 33:III.2103.H.1. [LAC 33:III.2103.H.1]

364 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. [LAC 33:III.2103.H.3]

365 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

366 Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, equip each opening in the roof with a gasketed cover, seal, or lid and maintain in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Close automatic bleeder vents at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. Set rim vents to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting. Equip automatic bleeder vents and rim space vents with gaskets. Provide each emergency roof drain with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening. Subpart Kb. [40 CFR 60.112b(a)(2)(ii)]

367 Equip with an external floating roof consisting of a pontoon-type or double-deck type cover that rests on the liquid surface in a vessel with no fixed roof. Equip with a closure device between the wall of the storage vessel and the roof edge. The closure device consists of two seals, secondary above the primary. The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in 40 CFR 60.113b(b)(4), the primary seal shall completely cover the annular space between the edge of the floating roof and tank wall. The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in 40 CFR 60.113b(b)(4). The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. Subpart Kb. [40 CFR 60.112b(a)(2)]

368 Seal gap area & width monitored by measurement at the regulation's specified frequency. Using the procedures in 40 CFR 60.113b(b)(2) determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel during the hydrostatic testing of the vessel or within 60 days of the initial fill with VOL and at least once every 5 years thereafter. Subpart Kb. [40 CFR 60.113b(b)(1)(i)]
Which Months: All Year Statistical Basis: None specified

369 Seal gap area & width monitored by measurement at the regulation's specified frequency. Using the procedures in 40 CFR 60.113b(b)(2) determine the gap areas and maximum gap widths between the secondary seal and the wall of the storage vessel within 60 days of the initial fill with VOL and at least once per year thereafter. Subpart Kb. [40 CFR 60.113b(b)(1)(ii)]
Which Months: All Year Statistical Basis: None specified

370 Add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in 40 CFR 60.113b(b)(4). Subpart Kb. [40 CFR 60.113b(b)(3)]

371 Seal gap area <= 212 cm^2/m of tank diameter (accumulated area) for gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(i)]
Which Months: All Year Statistical Basis: None specified

EQT034 9-07 Tank 6404 (Clovelly Dome)

372 Seal gap width <= 3.81 cm for the width of any portion of any gap between the tank wall and the mechanical shoe or liquid-mounted primary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(i)]
Which Months: All Year Statistical Basis: None specified

373 One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61 cm above the stored liquid surface. Subpart Kb. [40 CFR 60.113b(b)(4)(i)(A)]

374 There are to be no holes, tears, or other openings in the shoe, primary seal fabric, or seal envelope. Subpart Kb. [40 CFR 60.113b(b)(4)(i)(B)]

375 Install the secondary seal above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in 60.113b(b)(2)(iii). Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(A)]

376 Seal gap area <= 21.2 cm^2/m of tank diameter (accumulated area) for gaps between the tank wall and the secondary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(B)]
Which Months: All Year Statistical Basis: None specified

377 Seal gap width <= 1.27 cm for the width of any portion of any gap between the tank wall and the secondary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(B)]
Which Months: All Year Statistical Basis: None specified

378 There are to be no holes, tears, or other openings in the secondary seal or seal fabric. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(C)]

379 Make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in 40 CFR 60.113b(b)(4) (i) and (ii) except as specified in 40 CFR 60.113b(b)(4)(iii). Subpart Kb. [40 CFR 60.113b(b)(4)]

380 Submit notification: Due at least 30 days in advance of any gap measurements required by 40 CFR 60.113b(b)(1) to afford DEQ the opportunity to have an observer present. Subpart Kb. [40 CFR 60.113b(b)(5)]

381 If the external floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with VOL. Subpart Kb. [40 CFR 60.113b(b)(6)(i)]

382 Submit notification in writing: Due at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by 40 CFR 60.113b(6) to afford DEQ an opportunity to inspect the storage vessel prior to refilling. If the inspection required by paragraph 40 CFR 60.113b(b)(6) is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, notify DEQ at least 7 days prior to the refilling of the storage vessel. Notify by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, submit notification in writing including the written documentation and send by express mail so that it is received by DEQ at least 7 days prior to the refilling. Subpart Kb. [40 CFR 60.113b(b)(6)(ii)]

383 Tank roof and seals monitored by visual inspection/determination at the regulation's specified frequency. Inspect the external floating roof, the primary seal, the secondary seal, and fittings each time the storage vessel is emptied and degassed. Subpart Kb. [40 CFR 60.113b(b)(6)]
Which Months: All Year Statistical Basis: None specified

384 Submit a report: Due to DEQ as an attachment to the notification required by 40 CFR 60.7(a)(3). This report shall describe the control equipment and certify that the control equipment meets the specifications of 40 CFR 60.112b(a)(2) and 60.113b(b)(2), (b)(3), and (b)(4). Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(1)]

385 Submit a report: Due to DEQ within 60 days of performing the seal gap measurements required by 40 CFR 60.113b(b)(1). The report shall contain: 1) the date of measurement, 2) the raw data obtained in the measurement, 3) the calculations described in 40 CFR 60.113b(b)(2) and (b)(3). Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(2)]

386 Gap measurement(s) recordkeeping by electronic or hard copy upon each occurrence of gap measurement performance, as required by 40 CFR 60.113b(b). Each record shall identify the storage vessel in which the measurement was performed and shall contain: 1) the date of measurement, 2) the raw data obtained in the measurement, 3) the calculations described in 40 CFR 60.113b(b)(2) and (b)(3). Keep copies of all records for at least two years. Subpart Kb. [40 CFR 60.115b(b)(3)]

EQT034 9-07 Tank 6404 (Clovelly Dome)

387 Submit a report: Due to DEQ within 30 days after each seal gap measurement that detects gaps exceeding the limitations specified by 40 CFR 60.113b(b)(4). The report will identify the vessel and contain the information specified in 40 CFR 60.115b(b)(2) and the date the vessel was emptied or the repairs made and date of repair. Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(4)]

388 VOL storage data recordkeeping by electronic or hard copy continuously. Records consist of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period. Keep copies of all records for at least two years. Subpart Kb. [40 CFR 60.116b(c)]

EQT035 10-07 Tank 6407 (Clovelly Dome)

389 Equip with a submerged fill pipe. [LAC 33:III.2103.B]

390 Seal closure devices required in LAC 33:III.2103.D shall have no visible holes, tears, or other openings in the seals or seal fabric. [LAC 33:III.2103.D.2.a]

391 Seal closure devices required in LAC 33:III.2103.D shall be intact and uniformly in place around the circumference of the floating roof and the tank wall. [LAC 33:III.2103.D.2.b]

392 Seal gap area <= 1 in^2/ft of tank diameter (6.5 cm2/0.3 m), for gaps between the secondary seal and tank wall that exceed 1/8 inch (0.32 cm) in width. [LAC 33:III.2103.D.2.c]
Which Months: All Year Statistical Basis: None specified

393 Seal gap area <= 10 in^2/ft of tank diameter (65 cm2/0.3 m), for gaps between the primary seal and tank wall that exceed 1/8 inch (0.32 cm) in width. [LAC 33:III.2103.D.2.d]
Which Months: All Year Statistical Basis: None specified

394 Secondary Seal or closure mechanism monitored by visual inspection/determination semiannually. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

395 Secondary seals: Seal gap area & width monitored by measurement annually at any tank level, provided the roof is off its legs. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

396 Primary seals: Seal gap area & width monitored by measurement once every five years at any tank level, provided the roof is off its legs. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

397 Equipment/operational data recordkeeping by electronic or hard copy upon occurrence of event. Keep records of conditions that are not up to the standards described in LAC 33:III.2103.D.2, and the date(s) that the standards are not met. Notify the administrative authority within seven days of noncompliance with LAC 33:III.2103.D.2. [LAC 33:III.2103.D.2.e]

398 Initiate repairs of seals within seven working days of recognition of defective conditions by ordering appropriate parts, to avoid noncompliance with LAC 33:III.2103. Complete repairs within three months of the ordering of the repair parts. [LAC 33:III.2103.D.2.e]

399 Provide all openings in the external floating roof (except for automatic bleeder vents, rim space vent, and leg sleeves) with a projection below the liquid surface. Equip each opening in the roof (except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves) with a cover, seal or lid that is to be maintained in a closed position at all times except when the device is in actual use. Keep automatic bleeder vents closed at all times except when the roof is being floated off the roof leg supports. Set rim vents to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Equip any emergency roof drain with a slotted membrane fabric cover or equivalent cover that covers at least 90 percent of the opening. [LAC 33:III.2103.D.3]

400 Equip with an external floating roof consisting of a pontoon type roof, double deck type roof, or external floating cover which will rest or float on the surface of the liquid contents and is equipped with a primary closure seal to close the space between the roof edge and tank wall and a continuous secondary seal (a rim mounted secondary) extending from the floating roof to the tank wall. [LAC 33:III.2103.D]

401 Determine compliance with LAC 33:III.2103.D.2 and 4 using the methods in LAC 33:III.2103.H.1. [LAC 33:III.2103.H.1]

402 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. [LAC 33:III.2103.H.3]

403 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

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404 Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, equip each opening in the roof with a gasketed cover, seal, or lid and maintain in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Close automatic bleeder vents at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. Set rim vents to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting. Equip automatic bleeder vents and rim space vents with gaskets. Provide each emergency roof drain with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening. Subpart Kb. [40 CFR 60.112b(a)(2)(ii)]

405 Equip with an external floating roof consisting of a pontoon-type or double-deck type cover that rests on the liquid surface in a vessel with no fixed roof. Equip with a closure device between the wall of the storage vessel and the roof edge. The closure device consists of two seals, secondary above the primary. The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in 40 CFR 60.113b(b)(4), the primary seal shall completely cover the annular space between the edge of the floating roof and tank wall. The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in 40 CFR 60.113b(b)(4). The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. Subpart Kb. [40 CFR 60.112b(a)(2)]

406 Seal gap area & width monitored by measurement at the regulation's specified frequency. Using the procedures in 40 CFR 60.113b(b)(2) determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel during the hydrostatic testing of the vessel or within 60 days of the initial fill with VOL and at least once every 5 years thereafter. Subpart Kb. [40 CFR 60.113b(b)(1)(i)]
Which Months: All Year Statistical Basis: None specified

407 Seal gap area & width monitored by measurement at the regulation's specified frequency. Using the procedures in 40 CFR 60.113b(b)(2) determine the gap areas and maximum gap widths between the secondary seal and the wall of the storage vessel within 60 days of the initial fill with VOL and at least once per year thereafter. Subpart Kb. [40 CFR 60.113b(b)(1)(ii)]
Which Months: All Year Statistical Basis: None specified

408 Add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in 40 CFR 60.113b(b)(4). Subpart Kb. [40 CFR 60.113b(b)(3)]

409 Seal gap area <= 212 cm^2/m of tank diameter (accumulated area) for gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(i)]
Which Months: All Year Statistical Basis: None specified

410 Seal gap width <= 3.81 cm for the width of any portion of any gap between the tank wall and the mechanical shoe or liquid-mounted primary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(i)]
Which Months: All Year Statistical Basis: None specified

411 One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61 cm above the stored liquid surface. Subpart Kb. [40 CFR 60.113b(b)(4)(i)(A)]

412 There are to be no holes, tears, or other openings in the shoe, primary seal fabric, or seal envelope. Subpart Kb. [40 CFR 60.113b(b)(4)(i)(B)]

413 Install the secondary seal above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in 60.113b(b)(2)(iii). Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(A)]

414 Seal gap area <= 21.2 cm^2/m of tank diameter (accumulated area) for gaps between the tank wall and the secondary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(B)]
Which Months: All Year Statistical Basis: None specified

415 Seal gap width <= 1.27 cm for the width of any portion of any gap between the tank wall and the secondary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(B)]
Which Months: All Year Statistical Basis: None specified

416 There are to be no holes, tears, or other openings in the secondary seal or seal fabric. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(C)]

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417 Make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in 40 CFR 60.113b(b)(4) (i) and (ii) except as specified in 40 CFR 60.113b(b)(4)(iii). Subpart Kb. [40 CFR 60.113b(b)(4)]

418 Submit notification: Due at least 30 days in advance of any gap measurements required by 40 CFR 60.113b(b)(1) to afford DEQ the opportunity to have an observer present. Subpart Kb. [40 CFR 60.113b(b)(5)]

419 If the external floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with VOL. Subpart Kb. [40 CFR 60.113b(b)(6)(i)]

420 Submit notification in writing: Due at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by 40 CFR 60.113b(6) to afford DEQ an opportunity to inspect the storage vessel prior to refilling. If the inspection required by paragraph 40 CFR 60.113b(b)(6) is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, notify DEQ at least 7 days prior to the refilling of the storage vessel. Notify by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, submit notification in writing including the written documentation and send by express mail so that it is received by DEQ at least 7 days prior to the refilling. Subpart Kb. [40 CFR 60.113b(b)(6)(ii)]

421 Tank roof and seals monitored by visual inspection/determination at the regulation's specified frequency. Inspect the external floating roof, the primary seal, the secondary seal, and fittings each time the storage vessel is emptied and degassed. Subpart Kb. [40 CFR 60.113b(b)(6)]
Which Months: All Year Statistical Basis: None specified

422 Submit a report: Due to DEQ as an attachment to the notification required by 40 CFR 60.7(a)(3). This report shall describe the control equipment and certify that the control equipment meets the specifications of 40 CFR 60.112b(a)(2) and 60.113b(b)(2), (b)(3), and (b)(4). Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(1)]

423 Submit a report: Due to DEQ within 60 days of performing the seal gap measurements required by 40 CFR 60.113b(b)(1). The report shall contain: 1) the date of measurement, 2) the raw data obtained in the measurement, 3) the calculations described in 40 CFR 60.113b(b)(2) and (b)(3). Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(2)]

424 Gap measurement(s) recordkeeping by electronic or hard copy upon each occurrence of gap measurement performance, as required by 40 CFR 60.113b(b). Each record shall identify the storage vessel in which the measurement was performed and shall contain: 1) the date of measurement, 2) the raw data obtained in the measurement, 3) the calculations described in 40 CFR 60.113b(b)(2) and (b)(3). Keep copies of all records for at least two years. Subpart Kb. [40 CFR 60.115b(b)(3)]

425 Submit a report: Due to DEQ within 30 days after each seal gap measurement that detects gaps exceeding the limitations specified by 40 CFR 60.113b(b)(4). The report will identify the vessel and contain the information specified in 40 CFR 60.115b(b)(2) and the date the vessel was emptied or the repairs made and date of repair. Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(4)]

426 VOL storage data recordkeeping by electronic or hard copy continuously. Records consist of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period. Keep copies of all records for at least two years. Subpart Kb. [40 CFR 60.116b(c)]

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427 Equip with a submerged fill pipe. [LAC 33:III.2103.B]

428 Seal closure devices required in LAC 33:III.2103.D shall have no visible holes, tears, or other openings in the seals or seal fabric. [LAC 33:III.2103.D.2.a]

429 Seal closure devices required in LAC 33:III.2103.D shall be intact and uniformly in place around the circumference of the floating roof and the tank wall. [LAC 33:III.2103.D.2.b]

430 Seal gap area <= 1 in^2/ft of tank diameter (6.5 cm2/0.3 m), for gaps between the secondary seal and tank wall that exceed 1/8 inch (0.32 cm) in width. [LAC 33:III.2103.D.2.c]
Which Months: All Year Statistical Basis: None specified

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431 Seal gap area <= 10 in^2/ft of tank diameter (65 cm2/0.3 m), for gaps between the primary seal and tank wall that exceed 1/8 inch (0.32 cm) in width. [LAC 33:III.2103.D.2.d]
Which Months: All Year Statistical Basis: None specified

432 Secondary Seal or closure mechanism monitored by visual inspection/determination semiannually. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

433 Secondary seals: Seal gap area & width monitored by measurement annually at any tank level, provided the roof is off its legs. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

434 Primary seals: Seal gap area & width monitored by measurement once every five years at any tank level, provided the roof is off its legs. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

435 Equipment/operational data recordkeeping by electronic or hard copy upon occurrence of event. Keep records of conditions that are not up to the standards described in LAC 33:III.2103.D.2, and the date(s) that the standards are not met. Notify the administrative authority within seven days of noncompliance with LAC 33:III.2103.D.2. [LAC 33:III.2103.D.2.e]

436 Initiate repairs of seals within seven working days of recognition of defective conditions by ordering appropriate parts, to avoid noncompliance with LAC 33:III.2103. Complete repairs within three months of the ordering of the repair parts. [LAC 33:III.2103.D.2.e]

437 Provide all openings in the external floating roof (except for automatic bleeder vents, rim space vent, and leg sleeves) with a projection below the liquid surface. Equip each opening in the roof (except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves) with a cover, seal or lid that is to be maintained in a closed position at all times except when the device is in actual use. Keep automatic bleeder vents closed at all times except when the roof is being floated off the roof leg supports. Set rim vents to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Equip any emergency roof drain with a slotted membrane fabric cover or equivalent cover that covers at least 90 percent of the opening. [LAC 33:III.2103.D.3]

438 Equip with an external floating roof consisting of a pontoon type roof, double deck type roof, or external floating cover which will rest or float on the surface of the liquid contents and is equipped with a primary closure seal to close the space between the roof edge and tank wall and a continuous secondary seal (a rim mounted secondary) extending from the floating roof to the tank wall. [LAC 33:III.2103.D]

439 Determine compliance with LAC 33:III.2103.D.2 and 4 using the methods in LAC 33:III.2103.H.1. [LAC 33:III.2103.H.1]

440 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. [LAC 33:III.2103.H.3]

441 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

442 Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, equip each opening in the roof with a gasketed cover, seal, or lid and maintain in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Close automatic bleeder vents at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. Set rim vents to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting. Equip automatic bleeder vents and rim space vents with gaskets. Provide each emergency roof drain with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening. Subpart Kb. [40 CFR 60.112b(a)(2)(ii)]

443 Equip with an external floating roof consisting of a pontoon-type or double-deck type cover that rests on the liquid surface in a vessel with no fixed roof. Equip with a closure device between the wall of the storage vessel and the roof edge. The closure device consists of two seals, secondary above the primary. The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in 40 CFR 60.113b(b)(4), the primary seal shall completely cover the annular space between the edge of the floating roof and tank wall. The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in 40 CFR 60.113b(b)(4). The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. Subpart Kb. [40 CFR 60.112b(a)(2)]

EQT036 11-07 Tank 6408 (Clovelly Dome)

444 Seal gap area & width monitored by measurement at the regulation's specified frequency. Using the procedures in 40 CFR 60.113b(b)(2) determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel during the hydrostatic testing of the vessel or within 60 days of the initial fill with VOL and at least once every 5 years thereafter. Subpart Kb. [40 CFR 60.113b(b)(1)(i)]
Which Months: All Year Statistical Basis: None specified

445 Seal gap area & width monitored by measurement at the regulation's specified frequency. Using the procedures in 40 CFR 60.113b(b)(2) determine the gap areas and maximum gap widths between the secondary seal and the wall of the storage vessel within 60 days of the initial fill with VOL and at least once per year thereafter. Subpart Kb. [40 CFR 60.113b(b)(1)(ii)]
Which Months: All Year Statistical Basis: None specified

446 Add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in 40 CFR 60.113b(b)(4). Subpart Kb. [40 CFR 60.113b(b)(3)]

447 Seal gap area <= 212 cm^2/m of tank diameter (accumulated area) for gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(i)]
Which Months: All Year Statistical Basis: None specified

448 Seal gap width <= 3.81 cm for the width of any portion of any gap between the tank wall and the mechanical shoe or liquid-mounted primary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(i)]
Which Months: All Year Statistical Basis: None specified

449 One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61 cm above the stored liquid surface. Subpart Kb. [40 CFR 60.113b(b)(4)(i)(A)]

450 There are to be no holes, tears, or other openings in the shoe, primary seal fabric, or seal envelope. Subpart Kb. [40 CFR 60.113b(b)(4)(i)(B)]

451 Install the secondary seal above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in 60.113b(b)(2)(iii). Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(A)]

452 Seal gap area <= 21.2 cm^2/m of tank diameter (accumulated area) for gaps between the tank wall and the secondary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(B)]
Which Months: All Year Statistical Basis: None specified

453 Seal gap width <= 1.27 cm for the width of any portion of any gap between the tank wall and the secondary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(B)]
Which Months: All Year Statistical Basis: None specified

454 There are to be no holes, tears, or other openings in the secondary seal or seal fabric. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(C)]

455 Make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in 40 CFR 60.113b(b)(4) (i) and (ii) except as specified in 40 CFR 60.113b(b)(4)(iii). Subpart Kb. [40 CFR 60.113b(b)(4)]

456 Submit notification: Due at least 30 days in advance of any gap measurements required by 40 CFR 60.113b(b)(1) to afford DEQ the opportunity to have an observer present. Subpart Kb. [40 CFR 60.113b(b)(5)]

457 If the external floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with VOL. Subpart Kb. [40 CFR 60.113b(b)(6)(i)]

458 Submit notification in writing: Due at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by 40 CFR 60.113b(6) to afford DEQ an opportunity to inspect the storage vessel prior to refilling. If the inspection required by paragraph 40 CFR 60.113b(b)(6) is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, notify DEQ at least 7 days prior to the refilling of the storage vessel. Notify by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, submit notification in writing including the written documentation and send by express mail so that it is received by DEQ at least 7 days prior to the refilling. Subpart Kb. [40 CFR 60.113b(b)(6)(ii)]

EQT036 11-07 Tank 6408 (Clovelly Dome)

459 Tank roof and seals monitored by visual inspection/determination at the regulation's specified frequency. Inspect the external floating roof, the primary seal, the secondary seal, and fittings each time the storage vessel is emptied and degassed. Subpart Kb. [40 CFR 60.113b(b)(6)]
Which Months: All Year Statistical Basis: None specified

460 Submit a report: Due to DEQ as an attachment to the notification required by 40 CFR 60.7(a)(3). This report shall describe the control equipment and certify that the control equipment meets the specifications of 40 CFR 60.112b(a)(2) and 60.113b(b)(2), (b)(3), and (b)(4). Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(1)]

461 Submit a report: Due to DEQ within 60 days of performing the seal gap measurements required by 40 CFR 60.113b(b)(1). The report shall contain: 1) the date of measurement, 2) the raw data obtained in the measurement, 3) the calculations described in 40 CFR 60.113b(b)(2) and (b)(3). Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(2)]

462 Gap measurement(s) recordkeeping by electronic or hard copy upon each occurrence of gap measurement performance, as required by 40 CFR 60.113b(b). Each record shall identify the storage vessel in which the measurement was performed and shall contain: 1) the date of measurement, 2) the raw data obtained in the measurement, 3) the calculations described in 40 CFR 60.113b(b)(2) and (b)(3). Keep copies of all records for at least two years. Subpart Kb. [40 CFR 60.115b(b)(3)]

463 Submit a report: Due to DEQ within 30 days after each seal gap measurement that detects gaps exceeding the limitations specified by 40 CFR 60.113b(b)(4). The report will identify the vessel and contain the information specified in 40 CFR 60.115b(b)(2) and the date the vessel was emptied or the repairs made and date of repair. Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(4)]

464 VOL storage data recordkeeping by electronic or hard copy continuously. Records consist of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period. Keep copies of all records for at least two years. Subpart Kb. [40 CFR 60.116b(c)]

EQT037 12-07 Tank 6411 (Clovelly Dome)

465 Equip with a submerged fill pipe. [LAC 33:III.2103.B]

466 Seal closure devices required in LAC 33:III.2103.D shall have no visible holes, tears, or other openings in the seals or seal fabric. [LAC 33:III.2103.D.2.a]

467 Seal closure devices required in LAC 33:III.2103.D shall be intact and uniformly in place around the circumference of the floating roof and the tank wall. [LAC 33:III.2103.D.2.b]

468 Seal gap area <= 1 in^2/ft of tank diameter (6.5 cm2/0.3 m), for gaps between the secondary seal and tank wall that exceed 1/8 inch (0.32 cm) in width. [LAC 33:III.2103.D.2.c]
Which Months: All Year Statistical Basis: None specified

469 Seal gap area <= 10 in^2/ft of tank diameter (65 cm2/0.3 m), for gaps between the primary seal and tank wall that exceed 1/8 inch (0.32 cm) in width. [LAC 33:III.2103.D.2.d]
Which Months: All Year Statistical Basis: None specified

470 Secondary Seal or closure mechanism monitored by visual inspection/determination semiannually. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

471 Secondary seals: Seal gap area & width monitored by measurement annually at any tank level, provided the roof is off its legs. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

472 Primary seals: Seal gap area & width monitored by measurement once every five years at any tank level, provided the roof is off its legs. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

473 Equipment/operational data recordkeeping by electronic or hard copy upon occurrence of event. Keep records of conditions that are not up to the standards described in LAC 33:III.2103.D.2, and the date(s) that the standards are not met. Notify the administrative authority within seven days of noncompliance with LAC 33:III.2103.D.2. [LAC 33:III.2103.D.2.e]

474 Initiate repairs of seals within seven working days of recognition of defective conditions by ordering appropriate parts, to avoid noncompliance with LAC 33:III.2103. Complete repairs within three months of the ordering of the repair parts. [LAC 33:III.2103.D.2.e]

EQT037 12-07 Tank 6411 (Clovelly Dome)

475 Provide all openings in the external floating roof (except for automatic bleeder vents, rim space vent, and leg sleeves) with a projection below the liquid surface. Equip each opening in the roof (except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves) with a cover, seal or lid that is to be maintained in a closed position at all times except when the device is in actual use. Keep automatic bleeder vents closed at all times except when the roof is being floated off the roof leg supports. Set rim vents to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Equip any emergency roof drain with a slotted membrane fabric cover or equivalent cover that covers at least 90 percent of the opening. [LAC 33:III.2103.D.3]

476 Equip with an external floating roof consisting of a pontoon type roof, double deck type roof, or external floating cover which will rest or float on the surface of the liquid contents and is equipped with a primary closure seal to close the space between the roof edge and tank wall and a continuous secondary seal (a rim mounted secondary) extending from the floating roof to the tank wall. [LAC 33:III.2103.D]

477 Determine compliance with LAC 33:III.2103.D.2 and 4 using the methods in LAC 33:III.2103.H.1. [LAC 33:III.2103.H.1]

478 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. [LAC 33:III.2103.H.3]

479 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

480 Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, equip each opening in the roof with a gasketed cover, seal, or lid and maintain in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Close automatic bleeder vents at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. Set rim vents to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting. Equip automatic bleeder vents and rim space vents with gaskets. Provide each emergency roof drain with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening. Subpart Kb. [40 CFR 60.112b(a)(2)(ii)]

481 Equip with an external floating roof consisting of a pontoon-type or double-deck type cover that rests on the liquid surface in a vessel with no fixed roof. Equip with a closure device between the wall of the storage vessel and the roof edge. The closure device consists of two seals, secondary above the primary. The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in 40 CFR 60.113b(b)(4), the primary seal shall completely cover the annular space between the edge of the floating roof and tank wall. The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in 40 CFR 60.113b(b)(4). The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. Subpart Kb. [40 CFR 60.112b(a)(2)]

482 Seal gap area & width monitored by measurement at the regulation's specified frequency. Using the procedures in 40 CFR 60.113b(b)(2) determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel during the hydrostatic testing of the vessel or within 60 days of the initial fill with VOL and at least once every 5 years thereafter. Subpart Kb. [40 CFR 60.113b(b)(1)(i)]
Which Months: All Year Statistical Basis: None specified

483 Seal gap area & width monitored by measurement at the regulation's specified frequency. Using the procedures in 40 CFR 60.113b(b)(2) determine the gap areas and maximum gap widths between the secondary seal and the wall of the storage vessel within 60 days of the initial fill with VOL and at least once per year thereafter. Subpart Kb. [40 CFR 60.113b(b)(1)(ii)]
Which Months: All Year Statistical Basis: None specified

484 Add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in 40 CFR 60.113b(b)(4). Subpart Kb. [40 CFR 60.113b(b)(3)]

485 Seal gap area <= 212 cm^2/m of tank diameter (accumulated area) for gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(i)]
Which Months: All Year Statistical Basis: None specified

EQT037 12-07 Tank 6411 (Clovelly Dome)

486 Seal gap width <= 3.81 cm for the width of any portion of any gap between the tank wall and the mechanical shoe or liquid-mounted primary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(i)]
Which Months: All Year Statistical Basis: None specified

487 One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61 cm above the stored liquid surface. Subpart Kb. [40 CFR 60.113b(b)(4)(i)(A)]

488 There are to be no holes, tears, or other openings in the shoe, primary seal fabric, or seal envelope. Subpart Kb. [40 CFR 60.113b(b)(4)(i)(B)]

489 Install the secondary seal above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in 60.113b(b)(2)(iii). Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(A)]

490 Seal gap area <= 21.2 cm^2/m of tank diameter (accumulated area) for gaps between the tank wall and the secondary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(B)]
Which Months: All Year Statistical Basis: None specified

491 Seal gap width <= 1.27 cm for the width of any portion of any gap between the tank wall and the secondary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(B)]
Which Months: All Year Statistical Basis: None specified

492 There are to be no holes, tears, or other openings in the secondary seal or seal fabric. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(C)]

493 Make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in 40 CFR 60.113b(b)(4) (i) and (ii) except as specified in 40 CFR 60.113b(b)(4)(iii). Subpart Kb. [40 CFR 60.113b(b)(4)]

494 Submit notification: Due at least 30 days in advance of any gap measurements required by 40 CFR 60.113b(b)(1) to afford DEQ the opportunity to have an observer present. Subpart Kb. [40 CFR 60.113b(b)(5)]

495 If the external floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with VOL. Subpart Kb. [40 CFR 60.113b(b)(6)(i)]

496 Submit notification in writing: Due at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by 40 CFR 60.113b(6) to afford DEQ an opportunity to inspect the storage vessel prior to refilling. If the inspection required by paragraph 40 CFR 60.113b(b)(6) is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, notify DEQ at least 7 days prior to the refilling of the storage vessel. Notify by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, submit notification in writing including the written documentation and send by express mail so that it is received by DEQ at least 7 days prior to the refilling. Subpart Kb. [40 CFR 60.113b(b)(6)(ii)]

497 Tank roof and seals monitored by visual inspection/determination at the regulation's specified frequency. Inspect the external floating roof, the primary seal, the secondary seal, and fittings each time the storage vessel is emptied and degassed. Subpart Kb. [40 CFR 60.113b(b)(6)]
Which Months: All Year Statistical Basis: None specified

498 Submit a report: Due to DEQ as an attachment to the notification required by 40 CFR 60.7(a)(3). This report shall describe the control equipment and certify that the control equipment meets the specifications of 40 CFR 60.112b(a)(2) and 60.113b(b)(2), (b)(3), and (b)(4). Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(1)]

499 Submit a report: Due to DEQ within 60 days of performing the seal gap measurements required by 40 CFR 60.113b(b)(1). The report shall contain: 1) the date of measurement, 2) the raw data obtained in the measurement, 3) the calculations described in 40 CFR 60.113b(b)(2) and (b)(3). Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(2)]

500 Gap measurement(s) recordkeeping by electronic or hard copy upon each occurrence of gap measurement performance, as required by 40 CFR 60.113b(b). Each record shall identify the storage vessel in which the measurement was performed and shall contain: 1) the date of measurement, 2) the raw data obtained in the measurement, 3) the calculations described in 40 CFR 60.113b(b)(2) and (b)(3). Keep copies of all records for at least two years. Subpart Kb. [40 CFR 60.115b(b)(3)]

EQT037 12-07 Tank 6411 (Clovelly Dome)

501 Submit a report: Due to DEQ within 30 days after each seal gap measurement that detects gaps exceeding the limitations specified by 40 CFR 60.113b(b)(4). The report will identify the vessel and contain the information specified in 40 CFR 60.115b(b)(2) and the date the vessel was emptied or the repairs made and date of repair. Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(4)]

502 VOL storage data recordkeeping by electronic or hard copy continuously. Records consist of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period. Keep copies of all records for at least two years. Subpart Kb. [40 CFR 60.116b(c)]

EQT038 13-07 Tank 6412 (Clovelly Dome)

503 Equip with a submerged fill pipe. [LAC 33:III.2103.B]

504 Seal closure devices required in LAC 33:III.2103.D shall have no visible holes, tears, or other openings in the seals or seal fabric. [LAC 33:III.2103.D.2.a]

505 Seal closure devices required in LAC 33:III.2103.D shall be intact and uniformly in place around the circumference of the floating roof and the tank wall. [LAC 33:III.2103.D.2.b]

506 Seal gap area <= 1 in^2/ft of tank diameter (6.5 cm2/0.3 m), for gaps between the secondary seal and tank wall that exceed 1/8 inch (0.32 cm) in width. [LAC 33:III.2103.D.2.c]
Which Months: All Year Statistical Basis: None specified

507 Seal gap area <= 10 in^2/ft of tank diameter (65 cm2/0.3 m), for gaps between the primary seal and tank wall that exceed 1/8 inch (0.32 cm) in width. [LAC 33:III.2103.D.2.d]
Which Months: All Year Statistical Basis: None specified

508 Secondary Seal or closure mechanism monitored by visual inspection/determination semiannually. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

509 Secondary seals: Seal gap area & width monitored by measurement annually at any tank level, provided the roof is off its legs. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

510 Primary seals: Seal gap area & width monitored by measurement once every five years at any tank level, provided the roof is off its legs. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

511 Equipment/operational data recordkeeping by electronic or hard copy upon occurrence of event. Keep records of conditions that are not up to the standards described in LAC 33:III.2103.D.2, and the date(s) that the standards are not met. Notify the administrative authority within seven days of noncompliance with LAC 33:III.2103.D.2. [LAC 33:III.2103.D.2.e]

512 Initiate repairs of seals within seven working days of recognition of defective conditions by ordering appropriate parts, to avoid noncompliance with LAC 33:III.2103. Complete repairs within three months of the ordering of the repair parts. [LAC 33:III.2103.D.2.e]

513 Provide all openings in the external floating roof (except for automatic bleeder vents, rim space vent, and leg sleeves) with a projection below the liquid surface. Equip each opening in the roof (except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves) with a cover, seal or lid that is to be maintained in a closed position at all times except when the device is in actual use. Keep automatic bleeder vents closed at all times except when the roof is being floated off the roof leg supports. Set rim vents to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Equip any emergency roof drain with a slotted membrane fabric cover or equivalent cover that covers at least 90 percent of the opening. [LAC 33:III.2103.D.3]

514 Equip with an external floating roof consisting of a pontoon type roof, double deck type roof, or external floating cover which will rest or float on the surface of the liquid contents and is equipped with a primary closure seal to close the space between the roof edge and tank wall and a continuous secondary seal (a rim mounted secondary) extending from the floating roof to the tank wall. [LAC 33:III.2103.D]

515 Determine compliance with LAC 33:III.2103.D.2 and 4 using the methods in LAC 33:III.2103.H.1. [LAC 33:III.2103.H.1]

516 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. [LAC 33:III.2103.H.3]

517 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

EQT038 13-07 Tank 6412 (Clovelly Dome)

518 Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, equip each opening in the roof with a gasketed cover, seal, or lid and maintain in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Close automatic bleeder vents at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. Set rim vents to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting. Equip automatic bleeder vents and rim space vents with gaskets. Provide each emergency roof drain with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening. Subpart Kb. [40 CFR 60.112b(a)(2)(ii)]

519 Equip with an external floating roof consisting of a pontoon-type or double-deck type cover that rests on the liquid surface in a vessel with no fixed roof. Equip with a closure device between the wall of the storage vessel and the roof edge. The closure device consists of two seals, secondary above the primary. The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in 40 CFR 60.113b(b)(4), the primary seal shall completely cover the annular space between the edge of the floating roof and tank wall. The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in 40 CFR 60.113b(b)(4). The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. Subpart Kb. [40 CFR 60.112b(a)(2)]

520 Seal gap area & width monitored by measurement at the regulation's specified frequency. Using the procedures in 40 CFR 60.113b(b)(2) determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel during the hydrostatic testing of the vessel or within 60 days of the initial fill with VOL and at least once every 5 years thereafter. Subpart Kb. [40 CFR 60.113b(b)(1)(i)]
Which Months: All Year Statistical Basis: None specified

521 Seal gap area & width monitored by measurement at the regulation's specified frequency. Using the procedures in 40 CFR 60.113b(b)(2) determine the gap areas and maximum gap widths between the secondary seal and the wall of the storage vessel within 60 days of the initial fill with VOL and at least once per year thereafter. Subpart Kb. [40 CFR 60.113b(b)(1)(ii)]
Which Months: All Year Statistical Basis: None specified

522 Add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in 40 CFR 60.113b(b)(4). Subpart Kb. [40 CFR 60.113b(b)(3)]

523 Seal gap area <= 212 cm^2/m of tank diameter (accumulated area) for gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(i)]
Which Months: All Year Statistical Basis: None specified

524 Seal gap width <= 3.81 cm for the width of any portion of any gap between the tank wall and the mechanical shoe or liquid-mounted primary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(i)]
Which Months: All Year Statistical Basis: None specified

525 One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61 cm above the stored liquid surface. Subpart Kb. [40 CFR 60.113b(b)(4)(i)(A)]

526 There are to be no holes, tears, or other openings in the shoe, primary seal fabric, or seal envelope. Subpart Kb. [40 CFR 60.113b(b)(4)(i)(B)]

527 Install the secondary seal above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in 60.113b(b)(2)(iii). Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(A)]

528 Seal gap area <= 21.2 cm^2/m of tank diameter (accumulated area) for gaps between the tank wall and the secondary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(B)]
Which Months: All Year Statistical Basis: None specified

529 Seal gap width <= 1.27 cm for the width of any portion of any gap between the tank wall and the secondary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(B)]
Which Months: All Year Statistical Basis: None specified

530 There are to be no holes, tears, or other openings in the secondary seal or seal fabric. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(C)]

EQT038 13-07 Tank 6412 (Clovelly Dome)

531 Make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in 40 CFR 60.113b(b)(4) (i) and (ii) except as specified in 40 CFR 60.113b(b)(4)(iii). Subpart Kb. [40 CFR 60.113b(b)(4)]

532 Submit notification: Due at least 30 days in advance of any gap measurements required by 40 CFR 60.113b(b)(1) to afford DEQ the opportunity to have an observer present. Subpart Kb. [40 CFR 60.113b(b)(5)]

533 If the external floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with VOL. Subpart Kb. [40 CFR 60.113b(b)(6)(i)]

534 Submit notification in writing: Due at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by 40 CFR 60.113b(6) to afford DEQ an opportunity to inspect the storage vessel prior to refilling. If the inspection required by paragraph 40 CFR 60.113b(b)(6) is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, notify DEQ at least 7 days prior to the refilling of the storage vessel. Notify by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, submit notification in writing including the written documentation and send by express mail so that it is received by DEQ at least 7 days prior to the refilling. Subpart Kb. [40 CFR 60.113b(b)(6)(ii)]

535 Tank roof and seals monitored by visual inspection/determination at the regulation's specified frequency. Inspect the external floating roof, the primary seal, the secondary seal, and fittings each time the storage vessel is emptied and degassed. Subpart Kb. [40 CFR 60.113b(b)(6)]
Which Months: All Year Statistical Basis: None specified

536 Submit a report: Due to DEQ as an attachment to the notification required by 40 CFR 60.7(a)(3). This report shall describe the control equipment and certify that the control equipment meets the specifications of 40 CFR 60.112b(a)(2) and 60.113b(b)(2), (b)(3), and (b)(4). Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(1)]

537 Submit a report: Due to DEQ within 60 days of performing the seal gap measurements required by 40 CFR 60.113b(b)(1). The report shall contain: 1) the date of measurement, 2) the raw data obtained in the measurement, 3) the calculations described in 40 CFR 60.113b(b)(2) and (b)(3). Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(2)]

538 Gap measurement(s) recordkeeping by electronic or hard copy upon each occurrence of gap measurement performance, as required by 40 CFR 60.113b(b). Each record shall identify the storage vessel in which the measurement was performed and shall contain: 1) the date of measurement, 2) the raw data obtained in the measurement, 3) the calculations described in 40 CFR 60.113b(b)(2) and (b)(3). Keep copies of all records for at least two years. Subpart Kb. [40 CFR 60.115b(b)(3)]

539 Submit a report: Due to DEQ within 30 days after each seal gap measurement that detects gaps exceeding the limitations specified by 40 CFR 60.113b(b)(4). The report will identify the vessel and contain the information specified in 40 CFR 60.115b(b)(2) and the date the vessel was emptied or the repairs made and date of repair. Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(4)]

540 VOL storage data recordkeeping by electronic or hard copy continuously. Records consist of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period. Keep copies of all records for at least two years. Subpart Kb. [40 CFR 60.116b(c)]

EQT039 14-07 Tank 6413 (Clovelly Dome)

541 Equip with a submerged fill pipe. [LAC 33:III.2103.B]

542 Seal closure devices required in LAC 33:III.2103.D shall have no visible holes, tears, or other openings in the seals or seal fabric. [LAC 33:III.2103.D.2.a]

543 Seal closure devices required in LAC 33:III.2103.D shall be intact and uniformly in place around the circumference of the floating roof and the tank wall. [LAC 33:III.2103.D.2.b]

544 Seal gap area <= 1 in^2/ft of tank diameter (6.5 cm2/0.3 m), for gaps between the secondary seal and tank wall that exceed 1/8 inch (0.32 cm) in width. [LAC 33:III.2103.D.2.c]
Which Months: All Year Statistical Basis: None specified

EQT039 14-07 Tank 6413 (Clovelly Dome)

545 Seal gap area <= 10 in^2/ft of tank diameter (65 cm2/0.3 m), for gaps between the primary seal and tank wall that exceed 1/8 inch (0.32 cm) in width. [LAC 33:III.2103.D.2.d]
Which Months: All Year Statistical Basis: None specified

546 Secondary Seal or closure mechanism monitored by visual inspection/determination semiannually. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

547 Secondary seals: Seal gap area & width monitored by measurement annually at any tank level, provided the roof is off its legs. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

548 Primary seals: Seal gap area & width monitored by measurement once every five years at any tank level, provided the roof is off its legs. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

549 Equipment/operational data recordkeeping by electronic or hard copy upon occurrence of event. Keep records of conditions that are not up to the standards described in LAC 33:III.2103.D.2, and the date(s) that the standards are not met. Notify the administrative authority within seven days of noncompliance with LAC 33:III.2103.D.2. [LAC 33:III.2103.D.2.e]

550 Initiate repairs of seals within seven working days of recognition of defective conditions by ordering appropriate parts, to avoid noncompliance with LAC 33:III.2103. Complete repairs within three months of the ordering of the repair parts. [LAC 33:III.2103.D.2.e]

551 Provide all openings in the external floating roof (except for automatic bleeder vents, rim space vent, and leg sleeves) with a projection below the liquid surface. Equip each opening in the roof (except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves) with a cover, seal or lid that is to be maintained in a closed position at all times except when the device is in actual use. Keep automatic bleeder vents closed at all times except when the roof is being floated off the roof leg supports. Set rim vents to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Equip any emergency roof drain with a slotted membrane fabric cover or equivalent cover that covers at least 90 percent of the opening. [LAC 33:III.2103.D.3]

552 Equip with an external floating roof consisting of a pontoon type roof, double deck type roof, or external floating cover which will rest or float on the surface of the liquid contents and is equipped with a primary closure seal to close the space between the roof edge and tank wall and a continuous secondary seal (a rim mounted secondary) extending from the floating roof to the tank wall. [LAC 33:III.2103.D]

553 Determine compliance with LAC 33:III.2103.D.2 and 4 using the methods in LAC 33:III.2103.H.1. [LAC 33:III.2103.H.1]

554 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. [LAC 33:III.2103.H.3]

555 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

556 Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, equip each opening in the roof with a gasketed cover, seal, or lid and maintain in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Close automatic bleeder vents at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. Set rim vents to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting. Equip automatic bleeder vents and rim space vents with gaskets. Provide each emergency roof drain with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening. Subpart Kb. [40 CFR 60.112b(a)(2)(ii)]

557 Equip with an external floating roof consisting of a pontoon-type or double-deck type cover that rests on the liquid surface in a vessel with no fixed roof. Equip with a closure device between the wall of the storage vessel and the roof edge. The closure device consists of two seals, secondary above the primary. The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in 40 CFR 60.113b(b)(4), the primary seal shall completely cover the annular space between the edge of the floating roof and tank wall. The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in 40 CFR 60.113b(b)(4). The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. Subpart Kb. [40 CFR 60.112b(a)(2)]

EQT039 14-07 Tank 6413 (Clovelly Dome)

558 Seal gap area & width monitored by measurement at the regulation's specified frequency. Using the procedures in 40 CFR 60.113b(b)(2) determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel during the hydrostatic testing of the vessel or within 60 days of the initial fill with VOL and at least once every 5 years thereafter. Subpart Kb. [40 CFR 60.113b(b)(1)(i)]
Which Months: All Year Statistical Basis: None specified

559 Seal gap area & width monitored by measurement at the regulation's specified frequency. Using the procedures in 40 CFR 60.113b(b)(2) determine the gap areas and maximum gap widths between the secondary seal and the wall of the storage vessel within 60 days of the initial fill with VOL and at least once per year thereafter. Subpart Kb. [40 CFR 60.113b(b)(1)(ii)]
Which Months: All Year Statistical Basis: None specified

560 Add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in 40 CFR 60.113b(b)(4). Subpart Kb. [40 CFR 60.113b(b)(3)]

561 Seal gap area <= 212 cm^2/m of tank diameter (accumulated area) for gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(i)]
Which Months: All Year Statistical Basis: None specified

562 Seal gap width <= 3.81 cm for the width of any portion of any gap between the tank wall and the mechanical shoe or liquid-mounted primary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(i)]
Which Months: All Year Statistical Basis: None specified

563 One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61 cm above the stored liquid surface. Subpart Kb. [40 CFR 60.113b(b)(4)(i)(A)]

564 There are to be no holes, tears, or other openings in the shoe, primary seal fabric, or seal envelope. Subpart Kb. [40 CFR 60.113b(b)(4)(i)(B)]

565 Install the secondary seal above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in 60.113b(b)(2)(iii). Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(A)]

566 Seal gap area <= 21.2 cm^2/m of tank diameter (accumulated area) for gaps between the tank wall and the secondary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(B)]
Which Months: All Year Statistical Basis: None specified

567 Seal gap width <= 1.27 cm for the width of any portion of any gap between the tank wall and the secondary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(B)]
Which Months: All Year Statistical Basis: None specified

568 There are to be no holes, tears, or other openings in the secondary seal or seal fabric. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(C)]

569 Make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in 40 CFR 60.113b(b)(4) (i) and (ii) except as specified in 40 CFR 60.113b(b)(4)(iii). Subpart Kb. [40 CFR 60.113b(b)(4)]

570 Submit notification: Due at least 30 days in advance of any gap measurements required by 40 CFR 60.113b(b)(1) to afford DEQ the opportunity to have an observer present. Subpart Kb. [40 CFR 60.113b(b)(5)]

571 If the external floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with VOL. Subpart Kb. [40 CFR 60.113b(b)(6)(i)]

572 Submit notification in writing: Due at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by 40 CFR 60.113b(6) to afford DEQ an opportunity to inspect the storage vessel prior to refilling. If the inspection required by paragraph 40 CFR 60.113b(b)(6) is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, notify DEQ at least 7 days prior to the refilling of the storage vessel. Notify by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, submit notification in writing including the written documentation and send by express mail so that it is received by DEQ at least 7 days prior to the refilling. Subpart Kb. [40 CFR 60.113b(b)(6)(ii)]

EQT039 14-07 Tank 6413 (Clovelly Dome)

573 Tank roof and seals monitored by visual inspection/determination at the regulation's specified frequency. Inspect the external floating roof, the primary seal, the secondary seal, and fittings each time the storage vessel is emptied and degassed. Subpart Kb. [40 CFR 60.113b(b)(6)]
Which Months: All Year Statistical Basis: None specified

574 Submit a report: Due to DEQ as an attachment to the notification required by 40 CFR 60.7(a)(3). This report shall describe the control equipment and certify that the control equipment meets the specifications of 40 CFR 60.112b(a)(2) and 60.113b(b)(2), (b)(3), and (b)(4). Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(1)]

575 Submit a report: Due to DEQ within 60 days of performing the seal gap measurements required by 40 CFR 60.113b(b)(1). The report shall contain: 1) the date of measurement, 2) the raw data obtained in the measurement, 3) the calculations described in 40 CFR 60.113b(b)(2) and (b)(3). Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(2)]

576 Gap measurement(s) recordkeeping by electronic or hard copy upon each occurrence of gap measurement performance, as required by 40 CFR 60.113b(b). Each record shall identify the storage vessel in which the measurement was performed and shall contain: 1) the date of measurement, 2) the raw data obtained in the measurement, 3) the calculations described in 40 CFR 60.113b(b)(2) and (b)(3). Keep copies of all records for at least two years. Subpart Kb. [40 CFR 60.115b(b)(3)]

577 Submit a report: Due to DEQ within 30 days after each seal gap measurement that detects gaps exceeding the limitations specified by 40 CFR 60.113b(b)(4). The report will identify the vessel and contain the information specified in 40 CFR 60.115b(b)(2) and the date the vessel was emptied or the repairs made and date of repair. Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(4)]

578 VOL storage data recordkeeping by electronic or hard copy continuously. Records consist of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period. Keep copies of all records for at least two years. Subpart Kb. [40 CFR 60.116b(c)]

EQT040 15-07 Tank 6414 (Clovelly Dome)

579 Equip with a submerged fill pipe. [LAC 33:III.2103.B]

580 Seal closure devices required in LAC 33:III.2103.D shall have no visible holes, tears, or other openings in the seals or seal fabric. [LAC 33:III.2103.D.2.a]

581 Seal closure devices required in LAC 33:III.2103.D shall be intact and uniformly in place around the circumference of the floating roof and the tank wall. [LAC 33:III.2103.D.2.b]

582 Seal gap area <= 1 in^2/ft of tank diameter (6.5 cm2/0.3 m), for gaps between the secondary seal and tank wall that exceed 1/8 inch (0.32 cm) in width. [LAC 33:III.2103.D.2.c]
Which Months: All Year Statistical Basis: None specified

583 Seal gap area <= 10 in^2/ft of tank diameter (65 cm2/0.3 m), for gaps between the primary seal and tank wall that exceed 1/8 inch (0.32 cm) in width. [LAC 33:III.2103.D.2.d]
Which Months: All Year Statistical Basis: None specified

584 Secondary Seal or closure mechanism monitored by visual inspection/determination semiannually. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

585 Secondary seals: Seal gap area & width monitored by measurement annually at any tank level, provided the roof is off its legs. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

586 Primary seals: Seal gap area & width monitored by measurement once every five years at any tank level, provided the roof is off its legs. [LAC 33:III.2103.D.2.e]
Which Months: All Year Statistical Basis: None specified

587 Equipment/operational data recordkeeping by electronic or hard copy upon occurrence of event. Keep records of conditions that are not up to the standards described in LAC 33:III.2103.D.2, and the date(s) that the standards are not met. Notify the administrative authority within seven days of noncompliance with LAC 33:III.2103.D.2. [LAC 33:III.2103.D.2.e]

588 Initiate repairs of seals within seven working days of recognition of defective conditions by ordering appropriate parts, to avoid noncompliance with LAC 33:III.2103. Complete repairs within three months of the ordering of the repair parts. [LAC 33:III.2103.D.2.e]

EQT040 15-07 Tank 6414 (Clovelly Dome)

589 Provide all openings in the external floating roof (except for automatic bleeder vents, rim space vent, and leg sleeves) with a projection below the liquid surface. Equip each opening in the roof (except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves) with a cover, seal or lid that is to be maintained in a closed position at all times except when the device is in actual use. Keep automatic bleeder vents closed at all times except when the roof is being floated off the roof leg supports. Set rim vents to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Equip any emergency roof drain with a slotted membrane fabric cover or equivalent cover that covers at least 90 percent of the opening. [LAC 33:III.2103.D.3]

590 Equip with an external floating roof consisting of a pontoon type roof, double deck type roof, or external floating cover which will rest or float on the surface of the liquid contents and is equipped with a primary closure seal to close the space between the roof edge and tank wall and a continuous secondary seal (a rim mounted secondary) extending from the floating roof to the tank wall. [LAC 33:III.2103.D]

591 Determine compliance with LAC 33:III.2103.D.2 and 4 using the methods in LAC 33:III.2103.H.1. [LAC 33:III.2103.H.1]

592 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. [LAC 33:III.2103.H.3]

593 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]

594 Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, equip each opening in the roof with a gasketed cover, seal, or lid and maintain in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Close automatic bleeder vents at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. Set rim vents to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting. Equip automatic bleeder vents and rim space vents with gaskets. Provide each emergency roof drain with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening. Subpart Kb. [40 CFR 60.112b(a)(2)(ii)]

595 Equip with an external floating roof consisting of a pontoon-type or double-deck type cover that rests on the liquid surface in a vessel with no fixed roof. Equip with a closure device between the wall of the storage vessel and the roof edge. The closure device consists of two seals, secondary above the primary. The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in 40 CFR 60.113b(b)(4), the primary seal shall completely cover the annular space between the edge of the floating roof and tank wall. The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in 40 CFR 60.113b(b)(4). The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. Subpart Kb. [40 CFR 60.112b(a)(2)]

596 Seal gap area & width monitored by measurement at the regulation's specified frequency. Using the procedures in 40 CFR 60.113b(b)(2) determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel during the hydrostatic testing of the vessel or within 60 days of the initial fill with VOL and at least once every 5 years thereafter. Subpart Kb. [40 CFR 60.113b(b)(1)(i)]
Which Months: All Year Statistical Basis: None specified

597 Seal gap area & width monitored by measurement at the regulation's specified frequency. Using the procedures in 40 CFR 60.113b(b)(2) determine the gap areas and maximum gap widths between the secondary seal and the wall of the storage vessel within 60 days of the initial fill with VOL and at least once per year thereafter. Subpart Kb. [40 CFR 60.113b(b)(1)(ii)]
Which Months: All Year Statistical Basis: None specified

598 Add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in 40 CFR 60.113b(b)(4). Subpart Kb. [40 CFR 60.113b(b)(3)]

599 Seal gap area <= 212 cm^2/m of tank diameter (accumulated area) for gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(i)]
Which Months: All Year Statistical Basis: None specified

EQT040 15-07 Tank 6414 (Clovelly Dome)

600 Seal gap width <= 3.81 cm for the width of any portion of any gap between the tank wall and the mechanical shoe or liquid-mounted primary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(i)]
Which Months: All Year Statistical Basis: None specified

601 One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61 cm above the stored liquid surface. Subpart Kb. [40 CFR 60.113b(b)(4)(i)(A)]

602 There are to be no holes, tears, or other openings in the shoe, primary seal fabric, or seal envelope. Subpart Kb. [40 CFR 60.113b(b)(4)(i)(B)]

603 Install the secondary seal above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in 60.113b(b)(2)(iii). Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(A)]

604 Seal gap area <= 21.2 cm^2/m of tank diameter (accumulated area) for gaps between the tank wall and the secondary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(B)]
Which Months: All Year Statistical Basis: None specified

605 Seal gap width <= 1.27 cm for the width of any portion of any gap between the tank wall and the secondary seal. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(B)]
Which Months: All Year Statistical Basis: None specified

606 There are to be no holes, tears, or other openings in the secondary seal or seal fabric. Subpart Kb. [40 CFR 60.113b(b)(4)(ii)(C)]

607 Make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in 40 CFR 60.113b(b)(4) (i) and (ii) except as specified in 40 CFR 60.113b(b)(4)(iii). Subpart Kb. [40 CFR 60.113b(b)(4)]

608 Submit notification: Due at least 30 days in advance of any gap measurements required by 40 CFR 60.113b(b)(1) to afford DEQ the opportunity to have an observer present. Subpart Kb. [40 CFR 60.113b(b)(5)]

609 If the external floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with VOL. Subpart Kb. [40 CFR 60.113b(b)(6)(i)]

610 Submit notification in writing: Due at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by 40 CFR 60.113b(6) to afford DEQ an opportunity to inspect the storage vessel prior to refilling. If the inspection required by paragraph 40 CFR 60.113b(b)(6) is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, notify DEQ at least 7 days prior to the refilling of the storage vessel. Notify by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, submit notification in writing including the written documentation and send by express mail so that it is received by DEQ at least 7 days prior to the refilling. Subpart Kb. [40 CFR 60.113b(b)(6)(ii)]

611 Tank roof and seals monitored by visual inspection/determination at the regulation's specified frequency. Inspect the external floating roof, the primary seal, the secondary seal, and fittings each time the storage vessel is emptied and degassed. Subpart Kb. [40 CFR 60.113b(b)(6)]
Which Months: All Year Statistical Basis: None specified

612 Submit a report: Due to DEQ as an attachment to the notification required by 40 CFR 60.7(a)(3). This report shall describe the control equipment and certify that the control equipment meets the specifications of 40 CFR 60.112b(a)(2) and 60.113b(b)(2), (b)(3), and (b)(4). Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(1)]

613 Submit a report: Due to DEQ within 60 days of performing the seal gap measurements required by 40 CFR 60.113b(b)(1). The report shall contain: 1) the date of measurement, 2) the raw data obtained in the measurement, 3) the calculations described in 40 CFR 60.113b(b)(2) and (b)(3). Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(2)]

614 Gap measurement(s) recordkeeping by electronic or hard copy upon each occurrence of gap measurement performance, as required by 40 CFR 60.113b(b). Each record shall identify the storage vessel in which the measurement was performed and shall contain: 1) the date of measurement, 2) the raw data obtained in the measurement, 3) the calculations described in 40 CFR 60.113b(b)(2) and (b)(3). Keep copies of all records for at least two years. Subpart Kb. [40 CFR 60.115b(b)(3)]

EQT040 15-07 Tank 6414 (Clovelly Dome)

615 Submit a report: Due to DEQ within 30 days after each seal gap measurement that detects gaps exceeding the limitations specified by 40 CFR 60.113b(b)(4). The report will identify the vessel and contain the information specified in 40 CFR 60.115b(b)(2) and the date the vessel was emptied or the repairs made and date of repair. Keep copies of all reports for at least two years. Subpart Kb. [40 CFR 60.115b(b)(4)]

616 VOL storage data recordkeeping by electronic or hard copy continuously. Records consist of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period. Keep copies of all records for at least two years. Subpart Kb. [40 CFR 60.116b(c)]

FUG001 10-78 Fugitive Emissions (Clovelly Dome)

617 Equip all rotary pumps and compressors handling volatile organic compounds having a true vapor pressure of 1.5 psia or greater at handling conditions with mechanical seals or other equivalent equipment. [LAC 33:III.2111]

GRP003 Crude Oil Storage Tank CAP (Clovelly Dome)

618 Throughput <= 230 MM bbl/yr. Noncompliance with this limitation is a reportable violation of the permit. Notify the Office of Environmental Compliance, Enforcement Division if the total annual facility-wide crude oil throughput exceeds the maximum listed in this specific condition for any twelve consecutive month period. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum

619 Throughput monitored by technically sound method continuously. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum

620 Throughput recordkeeping by electronic or hard copy monthly. Keep records of the total facility-wide crude oil throughput each month, as well as the total facility-wide crude oil throughput for the last twelve months. Make records available for inspection by DEQ personnel. [LAC 33:III.501.C.6]

621 Submit report: Due annually, by the 31st of March. Report the total annual facility-wide crude oil throughput for the preceding calendar year to the Office of Environmental Compliance, Enforcement Division. [LAC 33:III.501.C.6]

GRP004 Entire Facility

622 Emissions of smoke which pass onto or across a public road and create a traffic hazard by impairment of visibility as defined in LAC 33:III.111 or intensify an existing traffic hazard condition are prohibited. [LAC 33:III.1103]

623 Outdoor burning of waste material or other combustible material is prohibited. [LAC 33:III.1109.B]

624 Emissions of particulate matter which pass onto or across a public road and create a traffic hazard by impairment of visibility or intensify an existing traffic hazard condition are prohibited. [LAC 33:III.1303.B]

625 Maintain best practical housekeeping and maintenance practices at the highest possible standards to reduce the quantity of organic compounds emissions. Good housekeeping shall include, but not be limited to, the practices listed in LAC 33:III.2113.A.1-5. [LAC 33:III.2113.A]

626 Failure to pay the prescribed application fee or annual fee as provided herein, within 90 days after the due date, will constitute a violation of these regulations and shall subject the person to applicable enforcement actions under the Louisiana Environmental Quality Act including, but not limited to, revocation or suspension of the applicable permit, license, registration, or variance. [LAC 33:III.219]

627 Carbon monoxide <= 1.76 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum

628 Nitrogen oxides <= 45.56 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum

GRP004 **Entire Facility**

629 Particulate matter (10 microns or less) <= 1.05 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum
630 Sulfur dioxide <= 22.56 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum
631 Benzene <= 0.924 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum
632 VOC, Total <= 93.82 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum
633 Acetaldehyde <= 0.001 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum
634 Cumene <= 0.023 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum
635 Ethyl benzene <= 0.124 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum
636 Formaldehyde <= 0.001 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum
637 n-Hexane <= 0.948 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum
638 Toluene <= 0.590 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum
639 Xylene (mixed isomers) <= 0.447 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum
640 Submit standby plan for the reduction or elimination of emissions during an Air Pollution Alert, Air Pollution Warning, or Air Pollution Emergency: Due within 30 days after requested by the administrative authority. [LAC 33:III.5611.A]
641 During an Air Pollution Alert, Air Pollution Warning or Air Pollution Emergency, make the standby plan available on the premises to any person authorized by the department to enforce these regulations. [LAC 33:III.5611.B]
642 All affected facilities shall comply with all applicable provisions in 40 CFR 60 Subpart A. [40 CFR 60]

APPENDIX B

PART 70 OPERATING PERMIT APPLICATION COMPLETENESS CHECKLIST

PART 70 OPERATING PERMIT APPLICATION COMPLETENESS CHECKLIST

Instructions: Complete this checklist and submit with the completed air permit application.

LAC 33:III.	Completeness Questions Relative to the Part 70 Permit Application	Yes	No	NA	Location Within the Permit Application
517.A Timely Submittal	Was a Copy of the Application Also Submitted to EPA?	X			
517.B.1,2 Certification	Does the Application include a Certification by a Responsible Official?	X			Section 2.0
517.B.3 Certification	Does the Application Include Certification by a Professional Engineer or their Designee:	X			Section 2.0
517.D.1 Identifying Information	Does the Application Include:				
	1. Company Name, Physical and Mailing Address of Facility?	X			Section 2.0
	2. Map showing Location of the Facility?	X			Figure 1
	3. Owner and Operator Names and Agent?	X			Section 2.0
	4. Name and Telephone Number of Plant Manager or Contact?	X			Section 2.0
517.D.2 SIC Codes, Source Categories	Does the Application Include a Description of the Source's Processes and Products?	X			Section 1.0
	Does the Application Include the Source's SIC Code?	X			Section 2.0
	Does the Application Include EPA Source Category of HAPs if applicable?			X	
517.D.3,6 EIQ Sheets	Has an EIQ Sheet been Completed for each Emission Point whether an Area or Point Source?	X			Section 3.0
517.D.4 Monitoring Devices	Does the Application Include Identification and Description of Compliance Monitoring Devices or Activities?	X			Section 2.0
517.D.5 Revisions and Modifications Only	For Revisions or Modifications, Does the Application include a Description of the Proposed Change and any Resulting Change in Emissions?	X			Section 1.0
517.D.7 General Information	Does the Application Include Information Regarding Fuels, Fuel Use, Raw Materials, Production Rates, and Operating Schedules as necessary to substantiate emission rates?	X			Appendix D
517 D.8 Operating Limitations	Has Information Regarding any Limitations on Source Operation or any Applicable Work Practice Standards been Identified?	X			Section 1.0
517.D.9 Calculations	Are Emission Calculations Provided?	X			Appendix D
517.D.10 Regulatory Review	Does the Application Include a Citation and Description of Applicable Louisiana and Federal Air Quality Requirements and Standards?	X			Section 2.0

LAC 33:III.	Completeness Questions Relative to the Part 70 Permit Application	Yes	No	NA	Location Within the Permit Application
517.D.11 Test Methods	Has a Description of or a Reference to Applicable Test Methods Used to Determine Compliance with Standards been Provided?	X			Section 2.0
517.D.12 Major Sources of TAPs	Does the Application include Information Regarding the Compliance History of Sources Owned or Operated by the Applicant (per LAC 33.III.5111)?			X	
517.D.13 Major Sources of TAPs	Does the Application include a Demonstration to show that the Source Meets all Applicable MACT and Ambient Air Standard Requirements?			X	
517.D.14 PSD Sources Only	If Required by DEQ, Does the Application Include Information Regarding the Ambient Air Impact for Criteria Pollutants as Required for the Source Impact Analysis per LAC 33:III.509.K, L, and M?			X	
517 D.15 PSD Sources Only	If Required by DEQ, Does the Application Include a Detailed Ambient Air Analysis?			X	
517.D.16, 18	Has any Additional Information been Provided?	X			Figure 2
517.D.17 Fees	Has the Fee Code been Identified?	X			Section 2.0
	Is the Applicable Fee Included with the Application?	X			
517.E.1 Additional Part 70 Requirements	Does the Certification Statement Include a Description of the Compliance Status of Each Emission Point in the Source with All Applicable Requirements?	X			Section 2.0
517E.2 Additional Part 70 Requirements	Does the Certification Statement Include a Statement that the Source will continue to Comply with All Applicable Requirements with which the Source is in Compliance?	X			Section 2.0
517.E.3 Additional Part 70 Requirements	Does the Certification Statement Include a Statement that the Source will, on a timely basis, meet All Applicable Requirements that will Become Effective During the Permit Term?	X			Section 2.0
517.E.4 Additional Part 70 Requirements	Are there Applicable Requirements for which the Source is not in Compliance at the Time of Submittal?		X		
	Does the Application include a Compliance Plan Schedule?			X	
	Does the Schedule Include Milestone Dates for which Significant Actions will occur?			X	
	Does the Schedule Include Submittal Dates for Certified Progress Reports?			X	
517.E.5 Additional Part 70 Requirements Acid Rain	Is this Source Covered by the Federal Acid Rain Program?		X		
	Are the Requirements of LAC 33.III.517.E 1-4 included in the Acid Rain Portion of the Compliance Plan?			X	

LAC 33:III.	Completeness Questions Relative to the Part 70 Permit Application	Yes	No	NA	Location Within the Permit Application
517.E.6 Additional Part 70 Requirements	Have any Exemptions from any Applicable Requirements been Requested?	X			
	Is the List and explanations Provided?	X			Section 2.0
517.E.7 Additional Part 70 Requirements	Does the Application Include a Request for a Permit Shield?		X		
	Does the Request List those Federally Applicable Requirements for which the Shield is Requested along with the Corresponding Draft Permit Terms and conditions which are Proposed to Maintain Compliance?			X	
517.E.8 Additional Part 70 Requirements	Does the Application Identify and Reasonably Anticipated Alternative Operating Scenarios?		X		
	Does the Application include Sufficient Information to Develop permit Terms and Conditions for Each Scenario, Including Source Process and Emissions Data?			X	
517.F Confidentiality	Does the Application Include a Request for Non-Disclosure (Confidentiality)?		X		
525.B. Minor Permit Modifications	Does the Application Include a Listing of New Requirements Resulting for the Change?			X	
	Does the Application Include Certification by the Responsible Official that the Proposed Action Fits the Definition of a Minor Modification as per LAC 33:III.525.A.			X	
	Does the Certification also Request that Minor Modification Procedures be Used?			X	
	Does the Application, for Part 70 Sources, Include the Owner's Suggested Draft Permit and Completed Forms for the Permitting Authority to Use to Notify Affected States?			X	
La. R.S. 30:2018 – PSD/NNSR only	Has a copy of the answers to the questions posed in the Environmental Assessment Statement (Section 26) been sent to the local governing authority at no cost to the local governing authority?			X	
	Has a copy of the answers to the questions posed in the Environmental Assessment Statement (Section 26) been sent to the designated public library at no cost to the designated public library?			X	

APPENDIX C

ENVIRONMENTAL ASSESSMENT STATEMENT

Environmental Assessment Statement

1. **Have the potential and real adverse environmental effects of the proposed facility been avoided to the maximum extent possible?**

Yes. The LOOP LLC Port Complex currently operates under Permit No. 1560-00027-03 and is requesting permitting under a Louisiana Part 70 Operating Permit with this application. This application includes the addition of six crude oil storage tanks, to be permitted under the existing crude oil storage tank CAP, and the addition of one emergency diesel generator.

The potential and real adverse environmental effects of the proposed project have been avoided to the maximum extent possible. As discussed below, the facility is not anticipated to have any adverse environmental impacts.

The potential impacts from air emissions from the facility are minimal and will not cause any adverse impacts. All applicable federal and state regulations are complied within a timely manner and are utilized to minimize air emissions.

2. **Does a cost benefit analysis of the environmental impact costs balanced against the social and economic benefits of the proposed facility demonstrate that the latter outweighs the former?**

Yes. The social and economic benefits of the LOOP Complex greatly outweigh its environmental impact. The facility is subject to strict requirements to control air emissions. Controls are in place to prevent any other environmental media from being affected by the facility's operations. The LOOP Complex is not anticipated to have an adverse impact on the environment. The facility has significant social and economic benefits, on a local and national scale, with minimal environmental impact.

3. **Are there alternative projects which would offer more protection to the environment than the proposed facility without unduly curtailing non-environmental benefits?**

The proposed project is planned for the existing LOOP Complex. There are no alternative projects (i.e., technologies) which would offer more protection to the environment than the proposed project without unduly curtailing non-environmental benefits.

4. **Are there alternative sites which would offer more protection to the environment than the proposed facility site without unduly curtailing non-environmental benefits?**

No, it is an existing facility which is zoned for industrial use. Any other site would not offer more protection to the environment than the proposed project site without unduly curtailing non-environmental benefits.

5. **Are there mitigating measures which would offer more protection to the environment than the facility as proposed without unduly curtailing non-environmental benefits?**

No, there are no mitigating measures which would offer more protection to the environment than the project as proposed without unduly curtailing non-environmental benefits. The facility meets all state and federally applicable requirements to minimize emissions of regulated air pollutants. Emissions associated with operations at the facility have been minimized.

APPENDIX D

EMISSION CALCULATIONS

Crude Oil Storage Tank CAP
THEORETICAL OPERATING SCENARIO EMISSIONS SUMMARY

Clovelly Dome, Lafourche Parish, Louisiana
LOOP LLC

Tank Throughput	***25,000***	***bbls/day***
Tank Throughput	***9.1***	***MMbbls/yr***
Number of Tanks	***20***	***310-ft diameter***

Emission Summary for Tank CAP

Pollutant	Total Annual Emissions (tpy)	Average Hourly Emissions (lbs/hr)
TOTAL VOCs	**175.28**	**40.02**
Benzene	1.03	0.234
Cumene (Isopropyl benzene)	0.02	0.004
Ethylbenzene	0.11	0.025
n-Hexane	1.07	0.245
Toluene	0.58	0.133
Xylenes	0.35	0.080

Emission Summary Per Tank

Pollutant	Annual Throughput Per Tank (MMbbls)	Standing Losses per tank (lb/yr)	Withdrawal Losses per MMbbl throughput (lb/MMbbl)	Annual Operating Emissions (lbs/yr)	Landing Losses (lbs/event)	Landing Losses Events/yr	**Total Annual Emissions (tpy)**	**Maximum Hourly Emissions (lbs/hr)**
TOTAL VOCs	9.13	7,830	129.59	**9,012.43**	**6,550.20**	**1.3**	**8.76**	**5,252.21**
Benzene				52.80	38.24		**0.05**	30.66
Cumene (Isopropyl benzene)				1.53	0.289		**0.001**	0.231
Ethylbenzene				7.76	2.54		**0.01**	2.03
n-Hexane				53.83	41.08		**0.05**	32.94
Toluene				34.09	18.62		**0.03**	14.93
Xylenes				25.43	7.42		**0.02**	5.95
TOTAL TAP				**175.44**	**108.19**		**0.16**	

NOTES:
Standing Losses (Rim Seal Losses + Roof Fitting Losses) and Withdrawal Losses from TANKS 4.0.9d Program Emission Report.
Annual Operating Emissions = Standing Losses (lb/yr) + Withdrawal Losses per MMbbl throughput (lb/yr) * Throughput (MMbbls).
Speciated Annual Operating Emissions = Total VOC Annual Operating Emissions * Mass Fraction calculated from TANKS Emission Report.
Maximum Hourly Emissions = Refilling Loss from Landing Loss calculations.

TANKS 4.0.9d
Emissions Report - Detail Format
Tank Indentification and Physical Characteristics

Identification

User Identification:	Crude Oil Storage Tank
City:	Lafourche Parish
State:	Louisiana
Company:	LOOP LLC
Type of Tank:	External Floating Roof Tank
Description:	Crude Oil Storage Tank

Tank Dimensions

Diameter (ft):	310.00
Volume (gallons):	25,200,000.00
Turnovers:	15.21

Paint Characteristics

Internal Shell Condition:	Light Rust
Shell Color/Shade:	White/White
Shell Condition	Good

Roof Characteristics

Type:	Pontoon
Fitting Category	Detail

Tank Construction and Rim-Seal System

Construction:	Welded
Primary Seal:	Mechanical Shoe
Secondary Seal	Rim-mounted

Deck Fitting/Status	Quantity
Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	4
Automatic Gauge Float Well/Bolted Cover, Gasketed	1
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	6
Unslotted Guide-Pole Well/Gasketed Sliding Cover	2
Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask.	1
Roof Leg (3-in. Diameter)/Adjustable, Pontoon Area, Gasketed	38
Roof Leg (3-in. Diameter)/Adjustable, Center Area, Gasketed	151
Roof Drain (3-in. Diameter)/90% Closed	6

Meterological Data used in Emissions Calculations: New Orleans, Louisiana (Avg Atmospheric Pressure = 14.75 psia)

TANKS 4.0.9d
Emissions Report - Detail Format

Liquid Contents of Storage Tank

Crude Oil Storage Tank - External Floating Roof Tank
Lafourche Parish, Louisiana

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Crude Oil RVP 8	All	69.99	64.84	75.14	68.06	6.5139	N/A	N/A	50.0000			207.00	Option 4: RVP=8
1,2,4-Trimethylbenzene						0.0302	N/A	N/A	120.1900	0.0033	0.0001	120.19	Option 2: A=7.04383, B=1573.267, C=208.56
2,2,4-Trimethylpentane (isooctane)						0.7891	N/A	N/A	114.2300	0.0010	0.0005	114.23	Option 2: A=6.8118, B=1257.84, C=220.74
Benzene						1.5308	N/A	N/A	78.1100	0.0060	0.0058	78.11	Option 2: A=6.905, B=1211.033, C=220.79
Cyclohexane						1.5780	N/A	N/A	84.1600	0.0070	0.0070	84.16	Option 2: A=6.841, B=1201.53, C=222.65
Ethylbenzene						0.1524	N/A	N/A	106.1700	0.0040	0.0004	106.17	Option 2: A=6.975, B=1424.255, C=213.21
Hexane (-n)						2.4667	N/A	N/A	86.1700	0.0040	0.0063	86.17	Option 2: A=6.876, B=1171.17, C=224.41
Isopropyl benzene						0.0693	N/A	N/A	120.2000	0.0010	0.0000	120.20	Option 2: A=6.93666, B=1460.793, C=207.78
Toluene						0.4474	N/A	N/A	92.1300	0.0100	0.0028	92.13	Option 2: A=6.954, B=1344.8, C=219.48
Unidentified Components						7.2120	N/A	N/A	49.4912	0.9497	0.9759	220.76	
Xylene (-m)						0.1273	N/A	N/A	106.1700	0.0140	0.0011	106.17	Option 2: A=7.009, B=1462.266, C=215.11

TANKS 4.0.9d
Emissions Report - Detail Format
Detail Calculations (AP-42)

Crude Oil Storage Tank - External Floating Roof Tank
Lafourche Parish, Louisiana

Annual Emission Calcaulations	
Rim Seal Losses (lb):	3,463.0095
Seal Factor A (lb-mole/ft-yr):	0.6000
Seal Factor B (lb-mole/ft-yr (mph)^n):	0.4000
Average Wind Speed (mph):	8.1500
Seal-related Wind Speed Exponent:	1.0000
Value of Vapor Pressure Function:	0.1447
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	6.5139
Tank Diameter (ft):	310.0000
Vapor Molecular Weight (lb/lb-mole):	50.0000
Product Factor:	0.4000
Withdrawal Losses (lb):	1,182.4764
Annual Net Throughput (gal/yr.):	383,250,000.0000
Shell Clingage Factor (bbl/1000 sqft):	0.0060
Average Organic Liquid Density (lb/gal):	7.1000
Tank Diameter (ft):	310.0000
Roof Fitting Losses (lb):	4,366.9368
Value of Vapor Pressure Function:	0.1447
Vapor Molecular Weight (lb/lb-mole):	50.0000
Product Factor:	0.4000
Tot. Roof Fitting Loss Fact.(lb-mole/yr):	1,508.9409
Average Wind Speed (mph):	8.1500
Total Losses (lb):	9,012.4227

Roof Fitting/Status	Quantity	Roof Fitting Loss Factors KFa(lb-mole/yr)	KFb(lb-mole/(yr mph^n))	m	Losses(lb)
Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	4	1.60	0.00	0.00	18.5219
Automatic Gauge Float Well/Bolted Cover, Gasketed	1	2.80	0.00	0.00	8.1033
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	6	6.20	1.20	0.94	214.7406
Unslotted Guide-Pole Well/Gasketed Sliding Cover	2	25.00	13.00	2.20	3,613.9909
Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask	1	0.47	0.02	0.97	1.6736
Roof Leg (3-in. Diameter)/Adjustable, Pontoon Area, Gasketed	38	1.30	0.08	0.65	170.2519
Roof Leg (3-in. Diameter)/Adjustable, Center Area, Gasketed	151	0.53	0.11	0.13	291.8921
Roof Drain (3-in. Diameter)/90% Closed	6	1.80	0.14	1.10	47.7625

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: Annual

Crude Oil Storage Tank - External Floating Roof Tank
Lafourche Parish, Louisiana

	Losses(lbs)				
Components	Rim Seal Loss	Withdrawl Loss	Deck Fitting Loss	Deck Seam Loss	Total Emissions
Crude Oil RVP 8	3,463.01	1,182.48	4,366.94	0.00	9,012.42
Hexane (-n)	21.72	4.73	27.38	0.00	53.83
2,2,4-Trimethylpentane (isooctane)	1.74	1.18	2.19	0.00	5.11
Benzene	20.22	7.09	25.49	0.00	52.80
1,2,4-Trimethylbenzene	0.22	3.90	0.28	0.00	4.40
Cyclohexane	24.31	8.28	30.66	0.00	63.25
Ethylbenzene	1.34	4.73	1.69	0.00	7.76
Isopropyl benzene	0.15	1.18	0.19	0.00	1.53
Xylene (-m)	3.92	16.55	4.95	0.00	25.43
Toluene	9.85	11.82	12.42	0.00	34.09
Unidentified Components	3,379.54	1,123.00	4,261.69	0.00	8,764.23

STORAGE TANK LANDING LOSSES

LOOP LLC

Assumptions:

Loss from Emptying and Refilling EFR, Partial Liquid Heel Tanks

Description	Quantity	Unit	Basis
n_d = number of days roof is landed	1	day	Minimum Basis for Reference Methodology
Mv = Vapor Molecular Weight	50.00	lb/lb-mole	TANKS 4.0.9d Default
RVP = Reid Vapor Pressure	8.00	psia	TANKS 4.0.9d Default
W_L = Liquid Density	7.10	lb/gal	TANKS 4.0.9d Default
H_L = Height of Liquid Heel	0.50	ft	Conservative Estimate
Pa = Atmospheric Pressure	14.70	psia	Standard Atmospheric Pressure
R = Ideal Gas Constant	10.73	psia-ft^3 per lb-mole°R	

Site Specific Data:

Description	Quantity	Unit	Basis
T_{max} = Daily Maximum Ambient Temperature	537.70	°R, Annual Average for New Orleans, Louisiana	7.1, Table 7.1-7
T_{min} = Daily Minimum Ambient Temperature	518.70	°R, Annual Average for New Orleans, Louisiana	7.1, Table 7.1-7
a = Tank Paint Solar Absorbance	0.17	White Paint Color	7.1, Table 7.1-6
I = Insolation	1437	Btu/ft^{2}d, Annual Average New Orleans, Louisiana	7.1, Table 7.1-7

Given:

Description	Quantity	Unit
D = Tank Diameter	310.00	ft
Hr = Roof Leg Setting	3.00	ft

Other Calculated Parameters:

Description	Quantity	Unit, [Formula]	Basis
A = Constant in Vapor Pressure Equation	10.81	dimensionless, [A = 12.82-0.9672*ln(RVP)]	7.1, Figure 7.1-16
B = Constant in Vapor Pressure Equation	4732.40	°R, [B = 7261-1216*ln(RVP)]	7.1, Figure 7.1-16
P= True Vapor Pressure	6.57	psia, [P = EXP(A-(B/T_{LA}))]	7.1, Equation 1-12a
P*= Vapor Pressure Function	0.15	dimensionless, [P/Pa/(1+(1-(P/Pa))$^{0.5}$)^2]	Equation 12, API Document
T_{avg} = Daily Average Ambient Temperature	528.20	°R, [T_{avg}=(T_{max}+T_{min})/2]	7.1, Equation 1-14
deltaT_V = Daily Vapor Temperature Range	20.52	°R, [0.72(T_{max} - T_{min}) + 0.028al]	Equation 7, API Document
T_{LA} = Daily Average Liquid Surface Temperature	530.14	°R, [0.44T_{avg} + 0.56T_B + 0.0079al]	7.1, Equation 1-13
T_B = Liquid Bulk Temperature	528.22	°R, [T_B=T_{avg}+6*a-1]	7.1, Equation 1-15
h_v = Height of Vapor Space	2.50	ft, [height of deck above tank bottom - height of liquid heel]	Equation 25, API Document
K_S = Standing Idle Saturation Factor	0.53	dimensionless, [1/1 + 0.053(Ph_v)]	Equation 8, API Document
K_E = Vapor Space Expansion Factor	0.18	dimensionless, [deltaT_V/T_{avg}(1+0.5BP/T_{avg}(Pa-P)]	Equation 6, API Document
A_f = Floor Area	75,477	ft^2, [A_f = π *(D/2)^2]	
V_V = Vapor Volume	188,692	ft^3, [V_V = A_f*h_v]	7.1, Equation 2-32
C_{sf} = Filling Saturation Correction Factor	0.96	dimensionless	Equation 23, API document

STORAGE TANK LANDING LOSSES

LOOP LLC

LANDING LOSS EMISSIONS PER EVENT:

	Quantity	Unit, Formula	Basis
S = Filling Saturation Factor	**0.5**	dimensionless	Partial Liquid Heel
L_S = Standing Idle Loss	**1,298**	lb, $[L_S = 0.57 n_d D(P^*)M_V]$	Equation 14 & 10, API Document
L_F = Refilling Loss	**5,252**	lb, $[L_F = (PV_V/RT_{avg})M_V(C_{sf}S)]$	Equation 21, API Document
L_T = Total Roof Landing and Refilling Loss	**6,550**	lb, $[L_T = L_S+L_F]$	Equation 1, API Document

SPECIATION (TANKS 4.09.d Crude Oil RVP 8)		Vapor Mass Fraction	EMISSIONS (lb)
Benzene		0.0058	38.24
Cumene (Isopropyl benzene)		0.0000	0.289
Ethylbenzene		0.0004	2.54
n-Hexane		0.0063	41.08
Toluene		0.0028	18.62
Xylenes		0.0011	7.42
	TOTAL TAP	**0.0165**	**108.19**
Iso-octane		0.0005	3.29
1,2,4-Trimethylbenzene		0.0001	0.415
Cyclohexane		0.0070	45.99
Unspeciated VOCs		0.9759	6392.32
	TOTAL VOC	1.0000	**6550.20**

REFERENCES:

AP-42 Section 7.1, Organic Liquid Storage Tanks, November 2006

Evaporative Loss from Storage Tank Floating Roof Landings , Technical Report 2567, American Petroleum Institute, April 2005

Potential to Emit

LOOP LLC Port Complex
Lafourche Parish, Louisiana

Source ID: **1-10 520 HP Emergency Generator**

Given:
Brake Horsepower 520 bhp
Operation Time 500 hrs

Calculation Methodology:
Average Hourly Rate [lb/hr] = Horsepower [hp] x Average Emission Factor [g/hp-hr] / Conversion Factor [454 g/lb]
Max Hourly Rate [lb/hr] = Average Hourly Rate [lb/hr]
Annual Emission Rate [tpy] = Average Hourly Rate [lb/hr] / Conversion Factor [2000 lb/ton] x Annual Operating Hours

Reference:
EPA AP-42 Chapter 3.3 Gasoline and Diesel Industrial Engines, Table 3.3-1, Table 3.3-2, October 1996

Emission Calculation:

Pollutant	Vendor Emission Factor[2] [g/hp-hr]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
PM_{10}	0.56	0.64	0.64	0.16
SO_2[1]	0.00205	0.002	0.002	0.001
NO_x	4.35	4.98	4.98	1.25
CO	0.54	0.62	0.62	0.15
Total VOC	0.06	0.07	0.07	0.02

VOC TAP Speciation[3]	Emission Factor[3] [lb/hp-hr]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
Acetaldehyde	5.37E-06	0.003	0.003	0.001
Benzene	6.53E-06	0.003	0.003	0.001
Formaldehyde	8.26E-06	0.004	0.004	0.001
Toluene	2.86E-06	0.001	0.001	0.000
Xylenes	2.00E-06	0.001	0.001	0.000

Notes:
(1) Emission factor based on EPA AP-42 Chapter 3.3 Gasoline and Diesel Industrial Engines.
(2) Emission factor based on Cummins Exhaust Data, full standby emission rates.
(3) TAP Speciation selected from AP-42 Chapter 3, Table 3.3-2 with exponent factor greater than E-04 and converted using 7,000 Btu/hp-hr.

Potential to Emit

LOOP LLC Port Complex
Lafourche Parish, Louisiana

Source ID: **EQT003**
1-78 Crude Relief Tank

Given:

Contents	Crude Oil RVP 5
Tank Type	External Floating Roof
Diameter	100 ft
Throughput	23,100,000 gal/yr

Calculation Methodology:
EPA *TANKS 4.0.9d* Program Software
Average Hourly Rate [lb/hr] = TANKS Emission Report / Conversion Factor [8760 hrs/yr]
Max Hourly Rate [lb/hr] = Average Hourly Rate [lb/hr]
Annual Emission Rate [tpy] = TANKS Emission Report / Conversion Factor [2000 lb/ton]

Emission Calculation:

Pollutant	TANKS Emission Report [lbs/yr]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
Total VOC	3306.16	0.38	0.38	1.65
Benzene	34.96	0.004	0.004	0.017
Cumene (Isopropyl benzene)	0.47	0.0001	0.0001	0.0002
Ethylbenzene	3.12	0.0004	0.0004	0.002
n-Hexane	37.01	0.004	0.004	0.019
Toluene	18.59	0.002	0.002	0.009
Xylenes	9.62	0.001	0.001	0.005

TANKS 4.0.9d
Emissions Report - Detail Format
Tank Indentification and Physical Characteristics

Identification

User Identification:	1-78
City:	Lafourche Parish
State:	Louisiana
Company:	LOOP LLC
Type of Tank:	External Floating Roof Tank
Description:	Crude Relief Tank

Tank Dimensions

Diameter (ft):	100.00
Volume (gallons):	2,310,000.00
Turnovers:	10.00

Paint Characteristics

Internal Shell Condition:	Light Rust
Shell Color/Shade:	White/White
Shell Condition	Good

Roof Characteristics

Type:	Pontoon
Fitting Category	Typical

Tank Construction and Rim-Seal System

Construction:	Welded
Primary Seal:	Mechanical Shoe
Secondary Seal	Rim-mounted

Deck Fitting/Status	Quantity
Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	1
Automatic Gauge Float Well/Unbolted Cover, Ungasketed	1
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	1
Unslotted Guide-Pole Well/Ungasketed Sliding Cover	1
Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask.	1
Roof Leg (3-in. Diameter)/Adjustable, Pontoon Area, Ungasketed	17
Roof Leg (3-in. Diameter)/Adjustable, Center Area, Ungasketed	16
Rim Vent (6-in. Diameter)/Weighted Mech. Actuation, Gask.	1

Meterological Data used in Emissions Calculations: New Orleans, Louisiana (Avg Atmospheric Pressure = 14.75 psia)

TANKS 4.0.9d
Emissions Report - Detail Format

Liquid Contents of Storage Tank

1-78 - External Floating Roof Tank
Lafourche Parish, Louisiana

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Crude oil (RVP 5)	All	69.99	64.84	75.14	68.06	3.4885	N/A	N/A	50.0000			207.00	Option 4: RVP=5
1,2,4-Trimethylbenzene						0.0302	N/A	N/A	120.1900	0.0033	0.0001	120.19	Option 2: A=7.04383, B=1573.267, C=208.56
2,2,4-Trimethylpentane (isooctane)						0.7891	N/A	N/A	114.2300	0.0010	0.0009	114.23	Option 2: A=6.8118, B=1257.84, C=220.74
Benzene						1.5308	N/A	N/A	78.1100	0.0060	0.0109	78.11	Option 2: A=6.905, B=1211.033, C=220.79
Cyclohexane						1.5780	N/A	N/A	84.1600	0.0070	0.0131	84.16	Option 2: A=6.841, B=1201.53, C=222.65
Ethylbenzene						0.1524	N/A	N/A	106.1700	0.0040	0.0007	106.17	Option 2: A=6.975, B=1424.255, C=213.21
Hexane (-n)						2.4667	N/A	N/A	86.1700	0.0040	0.0117	86.17	Option 2: A=6.876, B=1171.17, C=224.41
Isopropyl benzene						0.0693	N/A	N/A	120.2000	0.0010	0.0001	120.20	Option 2: A=6.93666, B=1460.793, C=207.78
Toluene						0.4474	N/A	N/A	92.1300	0.0100	0.0053	92.13	Option 2: A=6.954, B=1344.8, C=219.48
Unidentified Components						3.8146	N/A	N/A	49.0381	0.9497	0.9550	220.76	
Xylene (-m)						0.1273	N/A	N/A	106.1700	0.0140	0.0021	106.17	Option 2: A=7.009, B=1462.266, C=215.11

TANKS 4.0.9d
Emissions Report - Detail Format
Detail Calculations (AP-42)

1-78 - External Floating Roof Tank
Lafourche Parish, Louisiana

Annual Emission Calcaulations

Rim Seal Losses (lb):	520.1711
Seal Factor A (lb-mole/ft-yr):	0.6000
Seal Factor B (lb-mole/ft-yr (mph)^n):	0.4000
Average Wind Speed (mph):	8.1500
Seal-related Wind Speed Exponent:	1.0000
Value of Vapor Pressure Function:	0.0674
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	3.4885
Tank Diameter (ft):	100.0000
Vapor Molecular Weight (lb/lb-mole):	50.0000
Product Factor:	0.4000
Withdrawal Losses (lb):	220.9449
Annual Net Throughput (gal/yr.):	23,100,000.0000
Shell Clingage Factor (bbl/1000 sqft):	0.0060
Average Organic Liquid Density (lb/gal):	7.1000
Tank Diameter (ft):	100.0000
Roof Fitting Losses (lb):	2,565.0430
Value of Vapor Pressure Function:	0.0674
Vapor Molecular Weight (lb/lb-mole):	50.0000
Product Factor:	0.4000
Tot. Roof Fitting Loss Fact.(lb-mole/yr):	1,903.4247
Average Wind Speed (mph):	8.1500
Total Losses (lb):	3,306.1590

Roof Fitting/Status	Quantity	Roof Fitting Loss Factors KFa(lb-mole/yr)	KFb(lb-mole/(yr mph^n))	m	Losses(lb)
Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	1	1.60	0.00	0.00	2.1561
Automatic Gauge Float Well/Unbolted Cover, Ungasketed	1	14.00	5.40	1.10	68.2785
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	1	6.20	1.20	0.94	16.6655
Unslotted Guide-Pole Well/Ungasketed Sliding Cover	1	31.00	150.00	1.40	2,356.0139
Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask.	1	0.47	0.02	0.97	0.7793
Roof Leg (3-in. Diameter)/Adjustable, Pontoon Area, Ungasketed	17	2.00	0.37	0.91	87.1612
Roof Leg (3-in. Diameter)/Adjustable, Center Area, Ungasketed	16	0.82	0.53	0.14	32.2629
Rim Vent (6-in. Diameter)/Weighted Mech. Actuation, Gask.	1	0.71	0.10	1.00	1.7256

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: Annual

1-78 - External Floating Roof Tank
Lafourche Parish, Louisiana

	Losses(lbs)				
Components	Rim Seal Loss	Withdrawl Loss	Deck Fitting Loss	Deck Seam Loss	Total Emissions
Crude oil (RVP 5)	520.17	220.94	2,565.04	0.00	3,306.16
Hexane (-n)	6.09	0.88	30.03	0.00	37.01
2,2,4-Trimethylpentane (isooctane)	0.49	0.22	2.40	0.00	3.11
Benzene	5.67	1.33	27.96	0.00	34.96
1,2,4-Trimethylbenzene	0.06	0.73	0.30	0.00	1.09
Cyclohexane	6.82	1.55	33.63	0.00	41.99
Ethylbenzene	0.38	0.88	1.86	0.00	3.12
Isopropyl benzene	0.04	0.22	0.21	0.00	0.47
Xylene (-m)	1.10	3.09	5.43	0.00	9.62
Toluene	2.76	2.21	13.62	0.00	18.59
Unidentified Components	496.76	209.83	2,449.61	0.00	3,156.20

Potential to Emit

LOOP LLC Port Complex
Lafourche Parish, Louisiana

Source ID: **EQT004**
5-78 Small Boat Harbor Slop Oil Tank

Given:

Contents	Wash water, lube oil, small quantities of diesel
Tank Type	Vertical Fixed Roof
Volume	79,315 gal
Throughput	84,000 gal/yr

Calculation Methodology:
EPA *TANKS 4.0.9d* Program Software
Average Hourly Rate [lb/hr] = TANKS Emission Report / Conversion Factor [8760 hrs/yr]
Max Hourly Rate [lb/hr] = Average Hourly Rate [lb/hr]
Annual Emission Rate [tpy] = TANKS Emission Report / Conversion Factor [2000 lb/ton]

Emission Calculation:

Pollutant	TANKS Emission Report [lbs/yr]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
Total VOC	19.51	0.002	0.002	0.01

TANKS 4.0.9d
Emissions Report - Detail Format
Tank Indentification and Physical Characteristics

Identification

User Identification:	5-78
City:	Lafourche Parish
State:	Louisiana
Company:	LOOP LLC
Type of Tank:	Vertical Fixed Roof Tank
Description:	Small Boat Harbor Slop Oil Tank

Tank Dimensions

Shell Height (ft):		16.00
Diameter (ft):		30.00
Liquid Height (ft) :		15.00
Avg. Liquid Height (ft):		8.00
Volume (gallons):		79,315.28
Turnovers:		1.06
Net Throughput(gal/yr):		84,000.00
Is Tank Heated (y/n):	N	

Paint Characteristics

Shell Color/Shade:	White/White
Shell Condition	Good
Roof Color/Shade:	White/White
Roof Condition:	Good

Roof Characteristics

Type:	Cone	
Height (ft)		0.00
Slope (ft/ft) (Cone Roof)		0.06

Breather Vent Settings

Vacuum Settings (psig):	0.00
Pressure Settings (psig)	0.00

Meterological Data used in Emissions Calculations: New Orleans, Louisiana (Avg Atmospheric Pressure = 14.75 psia)

TANKS 4.0.9d
Emissions Report - Detail Format
Liquid Contents of Storage Tank

5-78 - Vertical Fixed Roof Tank
Lafourche Parish, Louisiana

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Distillate fuel oil no. 2	All	69.99	64.84	75.14	68.06	0.0090	0.0077	0.0105	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009

TANKS 4.0.9d
Emissions Report - Detail Format
Detail Calculations (AP-42)

5-78 - Vertical Fixed Roof Tank
Lafourche Parish, Louisiana

Annual Emission Calcaulations

Standing Losses (lb):	17.1754
Vapor Space Volume (cu ft):	5,875.7600
Vapor Density (lb/cu ft):	0.0002
Vapor Space Expansion Factor:	0.0391
Vented Vapor Saturation Factor:	0.9961
Tank Vapor Space Volume:	
Vapor Space Volume (cu ft):	5,875.7600
Tank Diameter (ft):	30.0000
Vapor Space Outage (ft):	8.3125
Tank Shell Height (ft):	16.0000
Average Liquid Height (ft):	8.0000
Roof Outage (ft):	0.3125
Roof Outage (Cone Roof)	
Roof Outage (ft):	0.3125
Roof Height (ft):	0.0000
Roof Slope (ft/ft):	0.0625
Shell Radius (ft):	15.0000
Vapor Density	
Vapor Density (lb/cu ft):	0.0002
Vapor Molecular Weight (lb/lb-mole):	130.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0090
Daily Avg. Liquid Surface Temp. (deg. R):	529.6574
Daily Average Ambient Temp. (deg. F):	68.0375
Ideal Gas Constant R (psia cuft / (lb-mol-deg R)):	10.731
Liquid Bulk Temperature (deg. R):	527.7275
Tank Paint Solar Absorptance (Shell):	0.1700
Tank Paint Solar Absorptance (Roof):	0.1700
Daily Total Solar Insulation Factor (Btu/sqft day):	1,443.5256
Vapor Space Expansion Factor	
Vapor Space Expansion Factor:	0.0391
Daily Vapor Temperature Range (deg. R):	20.5932
Daily Vapor Pressure Range (psia):	0.0028
Breather Vent Press. Setting Range(psia):	0.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0090
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	0.0077
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	0.0105
Daily Avg. Liquid Surface Temp. (deg R):	529.6574
Daily Min. Liquid Surface Temp. (deg R):	524.5091
Daily Max. Liquid Surface Temp. (deg R):	534.8057
Daily Ambient Temp. Range (deg. R):	19.0583
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor:	0.9961
Vapor Pressure at Daily Average Liquid: Surface Temperature (psia):	0.0090

Vapor Space Outage (ft):	8.3125
Working Losses (lb):	2.3392
Vapor Molecular Weight (lb/lb-mole):	130.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0090
Annual Net Throughput (gal/yr.):	84,000.0000
Annual Turnovers:	1.0591
Turnover Factor:	1.0000
Maximum Liquid Volume (gal):	79,315.2772
Maximum Liquid Height (ft):	15.0000
Tank Diameter (ft):	30.0000
Working Loss Product Factor:	1.0000
Total Losses (lb):	19.5145

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: Annual

5-78 - Vertical Fixed Roof Tank
Lafourche Parish, Louisiana

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Distillate fuel oil no. 2	2.34	17.18	19.51

Potential to Emit

LOOP LLC Port Complex
Lafourche Parish, Louisiana

Source ID: **EQT006**
11-78 Fourchon Booster Station No. 2 Fuel Tank No.1

Given:

Contents	Diesel
Tank Type	Vertical Fixed Roof
Volume	1,175,041 gal
Throughput	23,000,000 gal/yr

Calculation Methodology:
EPA *TANKS 4.0.9d* Program Software
Average Hourly Rate [lb/hr] = TANKS Emission Report / Conversion Factor [8760 hrs/yr]
Max Hourly Rate [lb/hr] = Average Hourly Rate [lb/hr]
Annual Emission Rate [tpy] = TANKS Emission Report / Conversion Factor [2000 lb/ton]

Emission Calculation:

Pollutant	TANKS Emission Report [lbs/yr]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Emission Rate [tpy]
Total VOC	916.45	0.10	0.10	0.46
Benzene	1.80	0.0002	0.0002	0.001
Ethylbenzene	2.92	0.0003	0.0003	0.001
n-Hexane	0.36	0.00004	0.00004	0.0002
Toluene	21.09	0.002	0.002	0.011
Xylenes	54.40	0.006	0.006	0.027

TANKS 4.0.9d
Emissions Report - Detail Format
Tank Indentification and Physical Characteristics

Identification

User Identification:	11-78
City:	Lafourche Parish
State:	Louisiana
Company:	LOOP LLC
Type of Tank:	Vertical Fixed Roof Tank
Description:	Fourchon Booster Station No. 2 Fuel Tank No.1

Tank Dimensions

Shell Height (ft):	22.00
Diameter (ft):	100.00
Liquid Height (ft) :	20.00
Avg. Liquid Height (ft):	11.00
Volume (gallons):	1,175,041.14
Turnovers:	19.57
Net Throughput(gal/yr):	23,000,000.00
Is Tank Heated (y/n):	N

Paint Characteristics

Shell Color/Shade:	White/White
Shell Condition	Good
Roof Color/Shade:	White/White
Roof Condition:	Good

Roof Characteristics

Type:	Cone
Height (ft)	0.00
Slope (ft/ft) (Cone Roof)	0.06

Breather Vent Settings

Vacuum Settings (psig):	0.00
Pressure Settings (psig)	0.00

Meterological Data used in Emissions Calculations: New Orleans, Louisiana (Avg Atmospheric Pressure = 14.75 psia)

TANKS 4.0.9d
Emissions Report - Detail Format
Liquid Contents of Storage Tank

11-78 - Vertical Fixed Roof Tank
Lafourche Parish, Louisiana

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Distillate fuel oil no. 2	All	69.99	64.84	75.14	68.06	0.0090	0.0077	0.0105	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009
1,2,4-Trimethylbenzene						0.0302	0.0247	0.0367	120.1900	0.0100	0.0485	120.19	Option 2: A=7.04383, B=1573.267, C=208.56
Benzene						1.5308	1.3336	1.7516	78.1100	0.0000	0.0020	78.11	Option 2: A=6.905, B=1211.033, C=220.79
Ethylbenzene						0.1524	0.1282	0.1804	106.1700	0.0001	0.0032	106.17	Option 2: A=6.975, B=1424.255, C=213.21
Hexane (-n)						2.4667	2.1671	2.7992	86.1700	0.0000	0.0004	86.17	Option 2: A=6.876, B=1171.17, C=224.41
Toluene						0.4474	0.3832	0.5204	92.1300	0.0003	0.0230	92.13	Option 2: A=6.954, B=1344.8, C=219.48
Unidentified Components						0.0077	0.0070	0.0074	134.5121	0.9866	0.8635	189.60	
Xylene (-m)						0.1273	0.1069	0.1510	106.1700	0.0029	0.0594	106.17	Option 2: A=7.009, B=1462.266, C=215.11

TANKS 4.0.9d
Emissions Report - Detail Format
Detail Calculations (AP-42)

11-78 - Vertical Fixed Roof Tank
Lafourche Parish, Louisiana

Annual Emission Calcaulations

Standing Losses (lb):	275.9623
Vapor Space Volume (cu ft):	94,575.0287
Vapor Density (lb/cu ft):	0.0002
Vapor Space Expansion Factor:	0.0391
Vented Vapor Saturation Factor:	0.9943
Tank Vapor Space Volume:	
Vapor Space Volume (cu ft):	94,575.0287
Tank Diameter (ft):	100.0000
Vapor Space Outage (ft):	12.0417
Tank Shell Height (ft):	22.0000
Average Liquid Height (ft):	11.0000
Roof Outage (ft):	1.0417
Roof Outage (Cone Roof)	
Roof Outage (ft):	1.0417
Roof Height (ft):	0.0000
Roof Slope (ft/ft):	0.0625
Shell Radius (ft):	50.0000
Vapor Density	
Vapor Density (lb/cu ft):	0.0002
Vapor Molecular Weight (lb/lb-mole):	130.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0090
Daily Avg. Liquid Surface Temp. (deg. R):	529.6574
Daily Average Ambient Temp. (deg. F):	68.0375
Ideal Gas Constant R (psia cuft / (lb-mol-deg R)):	10.731
Liquid Bulk Temperature (deg. R):	527.7275
Tank Paint Solar Absorptance (Shell):	0.1700
Tank Paint Solar Absorptance (Roof):	0.1700
Daily Total Solar Insulation Factor (Btu/sqft day):	1,443.5256
Vapor Space Expansion Factor	
Vapor Space Expansion Factor:	0.0391
Daily Vapor Temperature Range (deg. R):	20.5932
Daily Vapor Pressure Range (psia):	0.0028
Breather Vent Press. Setting Range(psia):	0.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0090
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	0.0077
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	0.0105
Daily Avg. Liquid Surface Temp. (deg R):	529.6574
Daily Min. Liquid Surface Temp. (deg R):	524.5091
Daily Max. Liquid Surface Temp. (deg R):	534.8057
Daily Ambient Temp. Range (deg. R):	19.0583
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor:	0.9943
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0090

Vapor Space Outage (ft):	12.0417
Working Losses (lb):	640.4892
Vapor Molecular Weight (lb/lb-mole):	130.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0090
Annual Net Throughput (gal/yr.):	23,000,000.0000
Annual Turnovers:	19.5738
Turnover Factor:	1.0000
Maximum Liquid Volume (gal):	1,175,041.1430
Maximum Liquid Height (ft):	20.0000
Tank Diameter (ft):	100.0000
Working Loss Product Factor:	1.0000
Total Losses (lb):	916.4515

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: Annual

11-78 - Vertical Fixed Roof Tank
Lafourche Parish, Louisiana

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Distillate fuel oil no. 2	640.49	275.96	916.45
Hexane (-n)	0.25	0.11	0.36
Benzene	1.26	0.54	1.80
Toluene	14.74	6.35	21.09
Unidentified Components	553.09	238.31	791.40
Ethylbenzene	2.04	0.88	2.92
Xylene (-m)	38.02	16.38	54.40
1,2,4-Trimethylbenzene	31.09	13.39	44.48

Potential to Emit

LOOP LLC Port Complex
Lafourche Parish, Louisiana

Source ID: **EQT007**
12-78 Salt Dome Cavities (9)/Piping & Brine Storage Reservoir

Description of Operations
Brine displacement is used for transporting crude into and out of the storage caverns. The system operates in three modes. To be conservative, this calculation is based on the mode of operation that results in the highest potential for air emissions (See Mode #2 in System Operations on attached process description). As oil is received, it is injected into a cavern and the displaced brine is used to displace oil from another cavern for delivery. If the receiving rate is greater than the delivery rate, excess brine goes to the storage reservoir. Because the brine can become entrained with hydrocarbons, volatilization of hydrocarbons to air may occur from the reservoir. The reservoir has surface area of approximately 225 acres and an average depth of 10 ft. More detailed information regarding the operations of the caverns is attached.

Given:
Mode 2 Brine Hydrocarbon Concentration at the Cavern 0.062 ppm
Brine Design Flowrate 600 MMbbls/yr

Calculation Methodology:
Average Hourly Rate [lb/hr] = Water9 Output [MMg/yr] / Conversion Factor [8760 hr/yr] x Conversion Factor [2204.623 lb/MMg]
Max Hourly Rate [lb/hr] = Average Hourly Rate [lb/hr]
Annual Emission Rate [tpy] = Water9 Output [MMg/yr] x Conversion Factor [1.102 ton/MMg]
VOC TAP Speciation Emission Rate = Total VOC Emission Rate [lb/hr or tpy] x Liquid Weight Fraction

Reference:
EPA *Water9* Program Software

Emission Calculation:

Pollutant	Water9 Emissions [MMg/yr]	Liquid Weight Fraction	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
Total VOC	1.580	1.00	0.40	0.40	1.74
Benzene		0.006	0.002	0.002	0.010
Cumene (Isopropyl benzene)		0.001	0.0004	0.0004	0.002
Ethylbenzene		0.004	0.002	0.002	0.007
n-Hexane		0.004	0.002	0.002	0.007
Toluene		0.010	0.004	0.004	0.017
Xylenes		0.014	0.006	0.006	0.024

Notes:
VOC TAP Speciation from EPA *TANKS 4.0.9d* Program Software for Crude Oil RVP 8

WASTEWATER TREATMENT SUMMARY II 03-13-2007 12:21:25

Project C:\Documents and Settings\vtn\My Documents\VINH-NGUYEN\Models\WATER9\LOOP Cavern Simulation 02

COMPOUND	RATE (g/s)	Fraction Air	RATE (lb/day)	loading ppmw
WATER	3.86E-14	.	.	1000000.
Generic Organic material	2.89E-02	.47163	5.5081	.02
BENZENE	3.16E-04	.82591	.06017	.
ETHYLBENZENE	1.94E-04	.76175	.03699	.
HEXANE(-n)	1.96E-04	.76642	.03722	.
TOLUENE	5.03E-04	.78779	.09565	.
XYLENE	7.07E-04	.79164	.13456	.

TOTAL EMISSIONS ALL COMPOUNDS	3.09E-02 g/s air emissions
TOTAL EMISSIONS ALL COMPOUNDS	.97 Mg/yr air emissions
TOTAL LOADING	95806375.88 Mg/yr in waste
TOTAL WATER FLOW	3038. L/s

WASTEWATER TREATMENT SUMMARY II 03-13-2007 12:25:15

Project C:\Documents and Settings\vtn\My Documents\VINH-NGUYEN\Models\WATER9\LOOP Cavern Simulation 02

COMPOUND	RATE (g/s)	Fraction Air	RATE (lb/day)	loading ppmw
WATER	3.86E-14	.	.	1000000.
Generic Organic material	4.79E-02	.88072	9.1111	.06
BENZENE	3.38E-04	.99607	.06427	.
ETHYLBENZENE	2.23E-04	.98652	.04244	.
HEXANE(-n)	2.24E-04	.98948	.04256	.
TOLUENE	5.60E-04	.99184	.10666	.001
XYLENE	7.83E-04	.98972	.149	.001

TOTAL EMISSIONS ALL COMPOUNDS	5.00E-02 g/s air emissions
TOTAL EMISSIONS ALL COMPOUNDS	1.58 Mg/yr air emissions
TOTAL LOADING	28741912.37 Mg/yr in waste
TOTAL WATER FLOW	911.4 L/s

LOOP LLC Port Complex
Salt Dome Caverns

Loading Operations:

LOOP LLC Port Complex includes 9 salt dome caverns for storage of pipeline crude oil. Crude oil is piped in from a deepwater port via a 48-in pipeline. LOOP transports domestic and foreign crude out of the caverns through five outgoing pipelines. The maximum cumulative delivery rate is approximately 90,000 barrels per hour, but typical delivery rates are in the 70,000 barrel per hour range. Tankers unload directly into the 48-inch pipeline at a platform in the Gulf of Mexico. The maximum design unloading rate from a tanker is 100,000 barrels per hour. The total capacity of the caverns is 43 million barrels; one cavern is not in service and has a capacity of 3 million barrels. The average size of the caverns is 1,000 ft deep and 235 ft in diameter and the tops of the caverns lie 1,500 ft underground. The design throughput for the caverns is 1.4 million barrels per day.

Brine Displacement

A brine displacement mechanism is used for transporting the crude oil into and out of the storage caverns. For certain modes of operation, the incoming crude oil displaces brine from a cavern to the brine reservoir. When the stored crude oil is delivered, the brine is pumped from the reservoir back into the cavern to displace the crude. Brine flows in and out of the cavern through four 22-inch pipes. The brine pipes extend 1000 ft below the top of the cavern. The crude oil flows through 22-inch by 30-inch annuli surrounding the brine pipes and through 30-inch pipes at the centers of the caverns. The crude pipes terminate at the top of the cavern.

The brine reservoir is an open basin located above ground with a 25 million barrel capacity. It has a surface area of about 225 acres and an average depth of about 10 feet. The pond is lined with clay to prevent brine seepage into the ground.

System Operations

There are three basic modes of operation for receiving/delivering crude oils:

1) As oil is received, it is injected into a cavern and an equal volume of brine is displaced to the storage reservoir. Delivery is made by pumping this same brine back into the storage cavern and displacing the oil being delivered.
2) As oil is received, it is injected into a cavern and the displaced brine is used to displace oil from another cavern for delivery. If the receiving rate is greater than the delivery rate, the excess brine goes to the storage reservoir. Conversely, when the rate of delivery exceeds the receiving rate, the excess brine is made up from the reservoir. In typical operations, the rates are nearly in balance and little or no brine is transported to or from the reservoir. This balanced Mode 2 operations is termed the "floating-cavern" mode.
3) Mode 3 – As oil is received it is sent directly to the delivery pipelines, thereby passing entirely cavern storage and the need to move brine. This mode of operation is termed "tightlining."

Estimating Hydrocarbon Emissions

In the 1980s, a study was conducted on the operations of the caverns and the brine storage reservoir to estimate hydrocarbon emissions to the air from the reservoir for permitting purposes. LSU conducted the study, based on mathematical modeling of transfer processes, and generated a computer simulation to perform calculations. Samples of the brine were taken upstream from the the reservoir. The result of the computer simulation was approximately 2.5 tons of hydrocarbon emissions per year based on maximum crude throughput of 600 MM bbls/yr.

With this permit application, it was not possible to generate the same computer simulation as done by LSU in the 1980s. However, a detailed review of the study was conducted and determined veritable. A further evaluation of the cavern and brine system was performed using EPA's Water9 software. Similar results were found using the maximum crude throughput of 600 MM bbls/yr and concentration data of the brine from the LSU study. In Mode 2, the resulting emissions were 1.74 tpy of hydrocarbons. A conservative estimate of 30% brine displaced to the reservoir was used to model Mode 2 in a year-round operation. Although the amount of brine displaced to the reservoir under Mode 1 is higher (100%) than Mode 2, the concentration of the hydrocarbons detected in the brine during Mode 1 operation is lower (0.021 ppm) compared to 0.062 ppm in Mode 2. Therefore, according to Water9 calculations, potential emissions are greatest during Mode 2 operation.

Potential to Emit

LOOP LLC Port Complex
Lafourche Parish, Louisiana

Source ID: **EQT008**
13-78 Fourchon Booster Station No. 2 Fuel Tank No.2

Given:

Contents	Diesel
Tank Type	Vertical Fixed Roof
Volume	1,175,041 gal
Throughput	23,000,000 gal/yr

Calculation Methodology:
EPA *TANKS 4.0.9d* Program Software
Average Hourly Rate [lb/hr] = TANKS Emission Report / Conversion Factor [8760 hrs/yr]
Max Hourly Rate [lb/hr] = Average Hourly Rate [lb/hr]
Annual Emission Rate [tpy] = TANKS Emission Report / Conversion Factor [2000 lb/ton]

Emission Calculation:

Pollutant	TANKS Emission Report [lbs/yr]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Emission Rate [tpy]
Total VOC	916.45	0.10	0.10	0.46
Benzene	1.80	0.0002	0.0002	0.001
Ethylbenzene	2.92	0.0003	0.0003	0.001
n-Hexane	0.36	0.00004	0.00004	0.0002
Toluene	21.09	0.002	0.002	0.011
Xylenes	54.40	0.006	0.006	0.027

TANKS 4.0.9d
Emissions Report - Detail Format
Tank Indentification and Physical Characteristics

Identification

User Identification:	13-78
City:	Lafourche Parish
State:	Louisiana
Company:	LOOP LLC
Type of Tank:	Vertical Fixed Roof Tank
Description:	Fourchon Booster Station No. 2 Fuel Tank No.2

Tank Dimensions

Shell Height (ft):	22.00
Diameter (ft):	100.00
Liquid Height (ft) :	20.00
Avg. Liquid Height (ft):	11.00
Volume (gallons):	1,175,041.14
Turnovers:	19.57
Net Throughput(gal/yr):	23,000,000.00
Is Tank Heated (y/n):	N

Paint Characteristics

Shell Color/Shade:	White/White
Shell Condition	Good
Roof Color/Shade:	White/White
Roof Condition:	Good

Roof Characteristics

Type:	Cone	
Height (ft)		0.00
Slope (ft/ft) (Cone Roof)		0.06

Breather Vent Settings

Vacuum Settings (psig):	0.00
Pressure Settings (psig)	0.00

Meterological Data used in Emissions Calculations: New Orleans, Louisiana (Avg Atmospheric Pressure = 14.75 psia)

TANKS 4.0.9d
Emissions Report - Detail Format
Liquid Contents of Storage Tank

13-78 - Vertical Fixed Roof Tank
Lafourche Parish, Louisiana

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Distillate fuel oil no. 2	All	69.99	64.84	75.14	68.06	0.0090	0.0077	0.0105	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009
1,2,4-Trimethylbenzene						0.0302	0.0247	0.0367	120.1900	0.0100	0.0485	120.19	Option 2: A=7.04383, B=1573.267, C=208.56
Benzene						1.5308	1.3336	1.7516	78.1100	0.0000	0.0020	78.11	Option 2: A=6.905, B=1211.033, C=220.79
Ethylbenzene						0.1524	0.1282	0.1804	106.1700	0.0001	0.0032	106.17	Option 2: A=6.975, B=1424.255, C=213.21
Hexane (-n)						2.4667	2.1671	2.7992	86.1700	0.0000	0.0004	86.17	Option 2: A=6.876, B=1171.17, C=224.41
Toluene						0.4474	0.3832	0.5204	92.1300	0.0003	0.0230	92.13	Option 2: A=6.954, B=1344.8, C=219.48
Unidentified Components						0.0077	0.0070	0.0074	134.5121	0.9866	0.8635	189.60	
Xylene (-m)						0.1273	0.1069	0.1510	106.1700	0.0029	0.0594	106.17	Option 2: A=7.009, B=1462.266, C=215.11

TANKS 4.0.9d
Emissions Report - Detail Format
Detail Calculations (AP-42)

13-78 - Vertical Fixed Roof Tank
Lafourche Parish, Louisiana

Annual Emission Calcaulations	
Standing Losses (lb):	275.9623
Vapor Space Volume (cu ft):	94,575.0287
Vapor Density (lb/cu ft):	0.0002
Vapor Space Expansion Factor:	0.0391
Vented Vapor Saturation Factor:	0.9943
Tank Vapor Space Volume:	
Vapor Space Volume (cu ft):	94,575.0287
Tank Diameter (ft):	100.0000
Vapor Space Outage (ft):	12.0417
Tank Shell Height (ft):	22.0000
Average Liquid Height (ft):	11.0000
Roof Outage (ft):	1.0417
Roof Outage (Cone Roof)	
Roof Outage (ft):	1.0417
Roof Height (ft):	0.0000
Roof Slope (ft/ft):	0.0625
Shell Radius (ft):	50.0000
Vapor Density	
Vapor Density (lb/cu ft):	0.0002
Vapor Molecular Weight (lb/lb-mole):	130.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0090
Daily Avg. Liquid Surface Temp. (deg. R):	529.6574
Daily Average Ambient Temp. (deg. F):	68.0375
Ideal Gas Constant R (psia cuft / (lb-mol-deg R)):	10.731
Liquid Bulk Temperature (deg. R):	527.7275
Tank Paint Solar Absorptance (Shell):	0.1700
Tank Paint Solar Absorptance (Roof):	0.1700
Daily Total Solar Insulation Factor (Btu/sqft day):	1,443.5256
Vapor Space Expansion Factor	
Vapor Space Expansion Factor:	0.0391
Daily Vapor Temperature Range (deg. R):	20.5932
Daily Vapor Pressure Range (psia):	0.0028
Breather Vent Press. Setting Range(psia):	0.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0090
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	0.0077
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	0.0105
Daily Avg. Liquid Surface Temp. (deg R):	529.6574
Daily Min. Liquid Surface Temp. (deg R):	524.5091
Daily Max. Liquid Surface Temp. (deg R):	534.8057
Daily Ambient Temp. Range (deg. R):	19.0583
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor:	0.9943
Vapor Pressure at Daily Average Liquid: Surface Temperature (psia):	0.0090

Vapor Space Outage (ft):	12.0417
Working Losses (lb):	640.4892
Vapor Molecular Weight (lb/lb-mole):	130.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0090
Annual Net Throughput (gal/yr.):	23,000,000.0000
Annual Turnovers:	19.5738
Turnover Factor:	1.0000
Maximum Liquid Volume (gal):	1,175,041.1430
Maximum Liquid Height (ft):	20.0000
Tank Diameter (ft):	100.0000
Working Loss Product Factor:	1.0000
Total Losses (lb):	916.4515

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: Annual

13-78 - Vertical Fixed Roof Tank
Lafourche Parish, Louisiana

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Distillate fuel oil no. 2	640.49	275.96	916.45
Hexane (-n)	0.25	0.11	0.36
Benzene	1.26	0.54	1.80
Toluene	14.74	6.35	21.09
Unidentified Components	553.09	238.31	791.40
Ethylbenzene	2.04	0.88	2.92
Xylene (-m)	38.02	16.38	54.40
1,2,4-Trimethylbenzene	31.09	13.39	44.48

Potential to Emit

LOOP LLC Port Complex
Lafourche Parish, Louisiana

Source ID: **EQT009**
15-78 Fourchon Booster Station Standby Generator

Given:
Brake Horsepower 805 hp
Operation Time 500 hrs

Calculation Methodology:
Average Hourly Rate [lb/hr] = Horsepower [hp] x AP-42 Emission Factor [lb/hp-hr]
Max Hourly Rate [lb/hr] = Average Hourly Rate [lb/hr]
Annual Emission Rate [tpy] = Average Hourly Rate [lb/hr] / Conversion Factor [2000 lb/ton] x Annual Operating Hours

Reference:
EPA AP-42 Chapter 3.4 Large Stationary and All Stationary Dual-fuel Engines, Table 3.4-1, Table 3.4-3, October 1996

Emission Calculation:

Pollutant	Emission Factor [lb/hp-hr]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
PM_{10}	0.0007	0.56	0.56	0.14
SO_2[(1)]	0.0004	0.33	0.33	0.08
NO_x	0.024	19.32	19.32	4.83
CO	0.0055	4.43	4.43	1.11
Total VOC	0.000705	0.57	0.57	0.14

VOC TAP Speciation[(2)]	Emission Factor[(3)] [lb/hp-hr]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
Benzene	5.43E-06	0.004	0.004	0.001
Toluene	1.97E-06	0.002	0.002	0.000
Xylenes	1.35E-06	0.001	0.001	0.000

Notes:
(1) As guided by AP-42 Chapter 3, Table 3.4-1, SO_2 Emission Factor is 0.00809*S lb/MMBtu for diesel engines; S = sulfur content % = 0.05.
(2) TAP Speciation selected from AP-42 Chapter 3, Table 3.4-3 with exponent factor greater than E-04.
(3) AP-42 Chapter 3 uses an average brake-specific fuel consumption of 7,000 Btu/hp-hr to convert from lb/MMBtu to lb/hp-hr.

Potential to Emit

LOOP LLC Port Complex
Lafourche Parish, Louisiana

Source ID: **EQT011**
17-78 Clovelly Dome - Operations Center Standby Generator

Given:
Brake Horsepower 671 hp
Operation Time 500 hrs

Calculation Methodology:
Average Hourly Rate [lb/hr] = Horsepower [hp] x AP-42 Emission Factor [lb/hp-hr]
Max Hourly Rate [lb/hr] = Average Hourly Rate [lb/hr]
Annual Emission Rate [tpy] = Average Hourly Rate [lb/hr] / Conversion Factor [2000 lb/ton] x Annual Operating Hours

Reference:
EPA AP-42 Chapter 3.4 Large Stationary and All Stationary Dual-fuel Engines, Table 3.4-1, Table 3.4-3, October 1996

Emission Calculation:

Pollutant	Emission Factor [lb/hp-hr]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
PM_{10}	0.0007	0.47	0.47	0.12
SO_2[(1)]	0.0004	0.27	0.27	0.07
NO_x	0.024	16.10	16.10	4.03
CO	0.0055	3.69	3.69	0.92
Total VOC	0.000705	0.47	0.47	0.12

VOC TAP Speciation[(2)]	Emission Factor[(3)] [lb/hp-hr]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
Benzene	5.43E-06	0.004	0.004	0.001
Toluene	1.97E-06	0.001	0.001	0.000
Xylenes	1.35E-06	0.001	0.001	0.000

Notes:
(1) As guided by AP-42 Chapter 3, Table 3.4-1, SO_2 Emission Factor is 0.00809*S lb/MMBtu for diesel engines; S = sulfur content % = 0.05.
(2) TAP Speciation selected from AP-42 Chapter 3, Table 3.4-3 with exponent factor greater than E-04.
(3) AP-42 Chapter 3 uses an average brake-specific fuel consumption of 7,000 Btu/hp-hr to convert from lb/MMBtu to lb/hp-hr.

Potential to Emit

LOOP LLC Port Complex
Lafourche Parish, Louisiana

Source ID: **EQT012**
18-78 Clovelly Dome - Emergency Crude Transfer Pump

Given:
Brake Horsepowe 860 hp
Operation Time 500 hrs

Calculation Methodology:
Average Hourly Rate [lb/hr] = Horsepower [hp] x AP-42 Emission Factor [lb/hp-hr]
Max Hourly Rate [lb/hr] = Average Hourly Rate [lb/hr]
Annual Emission Rate [tpy] = Average Hourly Rate [lb/hr] / Conversion Factor [2000 lb/ton] x Annual Operating Hours

Reference:
EPA AP-42 Chapter 3.4 Large Stationary and All Stationary Dual-fuel Engines, Table 3.4-1, Table 3.4-3, October 1996

Emission Calculation:

Pollutant	Emission Factor [lb/hp-hr]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
PM_{10}	0.0007	0.60	0.60	0.15
SO_2[(1)]	0.0004	0.35	0.35	0.09
NO_x	0.024	20.64	20.64	5.16
CO	0.0055	4.73	4.73	1.18
Total VOC	0.000705	0.61	0.61	0.15

VOC TAP Speciation[(2)]	Emission Factor[(3)] [lb/hp-hr]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
Benzene	5.43E-06	0.005	0.005	0.001
Toluene	1.97E-06	0.002	0.002	0.000
Xylenes	1.35E-06	0.001	0.001	0.000

Notes:
(1) As guided by AP-42 Chapter 3, Table 3.4-1, SO_2 Emission Factor is 0.00809*S lb/MMBtu for diesel engines; S = sulfur content % = 0.05.
(2) TAP Speciation selected from AP-42 Chapter 3, Table 3.4-3 with exponent factor greater than E-04.
(3) AP-42 Chapter 3 uses an average brake-specific fuel consumption of 7,000 Btu/hp-hr to convert from lb/MMBtu to lb/hp-hr.

Potential to Emit

LOOP LLC Port Complex
Lafourche Parish, Louisiana

Source ID: **EQT013**
19-78 Clovelly Dome - Portable Diesel Generator

Given:
Brake Horsepower 10 hp
Operation Time 500 hrs

Calculation Methodology:
Average Hourly Rate [lb/hr] = Horsepower [hp] x AP-42 Emission Factor [lb/hp-hr]
Max Hourly Rate [lb/hr] = Average Hourly Rate [lb/hr]
Annual Emission Rate [tpy] = Average Hourly Rate [lb/hr] / Conversion Factor [2000 lb/ton] x Annual Operating Hours

Reference:
EPA AP-42 Chapter 3.3 Gasoline and Diesel Industrial Engines, Table 3.3-1, Table 3.3-2, October 1996

Emission Calculation:

Pollutant	Emission Factor [lb/hp-hr]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
PM_{10}	0.0022	0.02	0.02	0.01
SO_2	0.00205	0.02	0.02	0.01
NO_x	0.031	0.31	0.31	0.08
CO	0.00668	0.07	0.07	0.02
Total VOC	0.00247	0.02	0.02	0.01

VOC TAP Speciation[1]	Emission Factor[2] [lb/hp-hr]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
Acetaldehyde	5.37E-06	0.000	0.000	0.000
Benzene	6.53E-06	0.000	0.000	0.000
Formaldehyde	8.26E-06	0.000	0.000	0.000
Toluene	2.86E-06	0.000	0.000	0.000
Xylenes	2.00E-06	0.000	0.000	0.000

Notes:
(1) TAP Speciation selected from AP-42 Chapter 3, Table 3.3-2 with exponent factor greater than E-04.
(2) AP-42 Chapter 3 uses an average brake-specific fuel consumption of 7,000 Btu/hp-hr to convert from lb/MMBtu to lb/hp-hr.

Potential to Emit

LOOP LLC Port Complex
Lafourche Parish, Louisiana

Source ID: **EQT014**
20-78 Clovelly Fire Pump

Given:
Diesel Fuel Rate 1.92 MMBtu/hr
Operation Time 500 hrs

Calculation Methodology:
Average Hourly Rate [lb/hr] = Fuel Rate [MMBtu/hr] x AP-42 Emission Factor [lb/MMBtu]
Max Hourly Rate [lb/hr] = Average Hourly Rate [lb/hr]
Annual Emission Rate [tpy] = Average Hourly Rate [lb/hr] / Conversion Factor [2000 lb/ton] x Annual Operating Hours

Reference:
EPA AP-42 Chapter 3.3 Gasoline and Diesel Industrial Engines, Table 3.3-1, Table 3.3-2, October 1996

Emission Calculation:

Pollutant	Emission Factor [lb/MMBtu]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
PM_{10}	0.31	0.59	0.59	0.15
SO_2	0.29	0.56	0.56	0.14
NO_x	4.41	8.46	8.46	2.11
CO	0.95	1.82	1.82	0.46
Total VOC	0.35	0.67	0.67	0.17

VOC TAP Speciation[(1)]	Emission Factor [lb/MMBtu]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
Acetaldehyde	0.000767	0.001	0.001	0.000
Benzene	0.000933	0.002	0.002	0.000
Formaldehyde	0.00118	0.002	0.002	0.001
Toluene	0.000409	0.001	0.001	0.000
Xylenes	0.000285	0.001	0.001	0.000

Notes:
(1) TAP Speciation selected from AP-42 Chapter 3, Table 3.3-2 with exponent factor greater than E-04.

Potential to Emit

LOOP LLC Port Complex
Lafourche Parish, Louisiana

Source ID: **EQT015**
21-78 Clovelly Dome - Standby Generator - Brine Storage Reservoir

Given:
Brake Horsepowe 108 hp
Operation Time 500 hrs

Calculation Methodology:
Average Hourly Rate [lb/hr] = Horsepower [hp] x AP-42 Emission Factor [lb/hp-hr]
Max Hourly Rate [lb/hr] = Average Hourly Rate [lb/hr]
Annual Emission Rate [tpy] = Average Hourly Rate [lb/hr] / Conversion Factor [2000 lb/ton] x Annual Operating Hours

Reference:
EPA AP-42 Chapter 3.3 Gasoline and Diesel Industrial Engines, Table 3.3-1, Table 3.3-2, October 1996

Emission Calculation:

Pollutant	Emission Factor [lb/hp-hr]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
PM_{10}	0.0022	0.24	0.24	0.06
SO_2	0.00205	0.22	0.22	0.06
NO_x	0.031	3.35	3.35	0.84
CO	0.00668	0.72	0.72	0.18
Total VOC	0.00247	0.27	0.27	0.07

VOC TAP Speciation[1]	Emission Factor[2] [lb/hp-hr]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
Acetaldehyde	5.37E-06	0.001	0.001	0.000
Benzene	6.53E-06	0.001	0.001	0.000
Formaldehyde	8.26E-06	0.001	0.001	0.000
Toluene	2.86E-06	0.000	0.000	0.000
Xylenes	2.00E-06	0.000	0.000	0.000

Notes:
(1) TAP Speciation selected from AP-42 Chapter 3, Table 3.3-2 with exponent factor greater than E-04.
(2) AP-42 Chapter 3 uses an average brake-specific fuel consumption of 7,000 Btu/hp-hr to convert from lb/MMBtu to lb/hp-hr.

Potential to Emit

LOOP LLC Port Complex
Lafourche Parish, Louisiana

Source ID: **EQT016**
23-88 Clovelly Dome - Tank 1 Operations Center

Given:

Contents	Gasoline RVP 13
Tank Type	Horizontal
Volume	1,000 gal
Throughput	9,000 gal/yr

Calculation Methodology:
EPA *TANKS 4.0.9d* Program Software
Average Hourly Rate [lb/hr] = TANKS Emission Report / Conversion Factor [8760 hrs/yr]
Max Hourly Rate [lb/hr] = Average Hourly Rate [lb/hr]
Annual Emission Rate [tpy] = TANKS Emission Report / Conversion Factor [2000 lb/ton]

Emission Calculation:

Pollutant	TANKS Emission Report [lbs/yr]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
Total VOC	545.65	0.06	0.06	0.27
Benzene	2.67	0.0003	0.0003	0.001
Cumene (Isopropyl benzene)	0.03	0.000003	0.000003	0.00002
Ethylbenzene	0.21	0.00002	0.00002	0.0001
n-Hexane	2.39	0.0003	0.0003	0.001
Toluene	3.04	0.0003	0.0003	0.002
Xylenes	0.87	0.0001	0.0001	0.0004

TANKS 4.0.9d
Emissions Report - Detail Format
Tank Indentification and Physical Characteristics

Identification

User Identification:	23-88
City:	Lafourche Parish
State:	Louisiana
Company:	LOOP LLC
Type of Tank:	Horizontal Tank
Description:	Tank 1 Operations Center

Tank Dimensions

Shell Length (ft):		11.00
Diameter (ft):		4.00
Volume (gallons):		1,000.00
Turnovers:		9.00
Net Throughput(gal/yr):		9,000.00
Is Tank Heated (y/n):	N	
Is Tank Underground (y/n):	N	

Paint Characteristics

Shell Color/Shade:	White/White
Shell Condition	Good

Breather Vent Settings

Vacuum Settings (psig):	0.00
Pressure Settings (psig)	0.00

Meterological Data used in Emissions Calculations: New Orleans, Louisiana (Avg Atmospheric Pressure = 14.75 psia)

TANKS 4.0.9d
Emissions Report - Detail Format
Liquid Contents of Storage Tank

23-88 - Horizontal Tank
Lafourche Parish, Louisiana

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Gasoline (RVP 13)	All	69.99	64.84	75.14	68.06	8.3423	7.5979	9.1432	62.0000			92.00	Option 4: RVP=13, ASTM Slope=3
1,2,4-Trimethylbenzene						0.0302	0.0247	0.0367	120.1900	0.0250	0.0001	120.19	Option 2: A=7.04383, B=1573.267, C=208.56
Benzene						1.5308	1.3336	1.7516	78.1100	0.0180	0.0049	78.11	Option 2: A=6.905, B=1211.033, C=220.79
Cyclohexane						1.5780	1.3791	1.8000	84.1600	0.0024	0.0007	84.16	Option 2: A=6.841, B=1201.53, C=222.65
Ethylbenzene						0.1524	0.1282	0.1804	106.1700	0.0140	0.0004	106.17	Option 2: A=6.975, B=1424.255, C=213.21
Hexane (-n)						2.4667	2.1671	2.7992	86.1700	0.0100	0.0044	86.17	Option 2: A=6.876, B=1171.17, C=224.41
Isooctane									114.2200	0.0400	0.0000	114.22	
Isopropyl benzene						0.0693	0.0575	0.0831	120.2000	0.0050	0.0001	120.20	Option 2: A=6.93666, B=1460.793, C=207.78
Toluene						0.4474	0.3832	0.5204	92.1300	0.0700	0.0056	92.13	Option 2: A=6.954, B=1344.8, C=219.48
Unidentified Components						10.7314	10.7060	10.7107	61.6765	0.7456	0.9823	89.36	
Xylene (-m)						0.1273	0.1069	0.1510	106.1700	0.0700	0.0016	106.17	Option 2: A=7.009, B=1462.266, C=215.11

TANKS 4.0.9d
Emissions Report - Detail Format
Detail Calculations (AP-42)

23-88 - Horizontal Tank
Lafourche Parish, Louisiana

Annual Emission Calcaulations

Standing Losses (lb):	434.8189
Vapor Space Volume (cu ft):	88.0446
Vapor Density (lb/cu ft):	0.0910
Vapor Space Expansion Factor:	0.2802
Vented Vapor Saturation Factor:	0.5307
Tank Vapor Space Volume:	
Vapor Space Volume (cu ft):	88.0446
Tank Diameter (ft):	4.0000
Effective Diameter (ft):	7.4867
Vapor Space Outage (ft):	2.0000
Tank Shell Length (ft):	11.0000
Vapor Density	
Vapor Density (lb/cu ft):	0.0910
Vapor Molecular Weight (lb/lb-mole):	62.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	8.3423
Daily Avg. Liquid Surface Temp. (deg. R):	529.6574
Daily Average Ambient Temp. (deg. F):	68.0375
Ideal Gas Constant R (psia cuft / (lb-mol-deg R)):	10.731
Liquid Bulk Temperature (deg. R):	527.7275
Tank Paint Solar Absorptance (Shell):	0.1700
Daily Total Solar Insulation Factor (Btu/sqft day):	1,443.5256
Vapor Space Expansion Factor	
Vapor Space Expansion Factor:	0.2802
Daily Vapor Temperature Range (deg. R):	20.5932
Daily Vapor Pressure Range (psia):	1.5452
Breather Vent Press. Setting Range(psia):	0.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	8.3423
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	7.5979
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	9.1432
Daily Avg. Liquid Surface Temp. (deg R):	529.6574
Daily Min. Liquid Surface Temp. (deg R):	524.5091
Daily Max. Liquid Surface Temp. (deg R):	534.8057
Daily Ambient Temp. Range (deg. R):	19.0583
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor:	0.5307
Vapor Pressure at Daily Average Liquid: Surface Temperature (psia):	8.3423
Vapor Space Outage (ft):	2.0000
Working Losses (lb):	110.8334
Vapor Molecular Weight (lb/lb-mole):	62.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	8.3423
Annual Net Throughput (gal/yr.):	9,000.0000

Annual Turnovers:	9.0000
Turnover Factor:	1.0000
Tank Diameter (ft):	4.0000
Working Loss Product Factor:	1.0000

Total Losses (lb):	545.6523

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: Annual

23-88 - Horizontal Tank
Lafourche Parish, Louisiana

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Gasoline (RVP 13)	110.83	434.82	545.65
Hexane (-n)	0.49	1.91	2.39
Benzene	0.54	2.13	2.67
Xylene (-m)	0.18	0.69	0.87
Isopropyl benzene	0.01	0.03	0.03
1,2,4-Trimethylbenzene	0.01	0.06	0.07
Cyclohexane	0.07	0.29	0.37
Unidentified Components	108.87	427.13	536.00
Isooctane	0.00	0.00	0.00
Toluene	0.62	2.42	3.04
Ethylbenzene	0.04	0.17	0.21

Potential to Emit

LOOP LLC Port Complex
Lafourche Parish, Louisiana

Source ID: **EQT017**
24-88 Clovelly Dome - Tank 2 Operations Center

Given:

Contents	Gasoline RVP 13
Tank Type	Horizontal
Volume	1,000 gal
Throughput	9,000 gal/yr

Calculation Methodology:
EPA *TANKS 4.0.9d* Program Software
Average Hourly Rate [lb/hr] = TANKS Emission Report / Conversion Factor [8760 hrs/yr]
Max Hourly Rate [lb/hr] = Average Hourly Rate [lb/hr]
Annual Emission Rate [tpy] = TANKS Emission Report / Conversion Factor [2000 lb/ton]

Emission Calculation:

Pollutant	TANKS Emission Report [lbs/yr]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
Total VOC	545.65	0.06	0.06	0.27
Benzene	2.67	0.0003	0.0003	0.001
Cumene (Isopropyl benzene)	0.03	0.000003	0.000003	0.00002
Ethylbenzene	0.21	0.00002	0.00002	0.0001
n-Hexane	2.39	0.0003	0.0003	0.001
Toluene	3.04	0.0003	0.0003	0.002
Xylenes	0.87	0.0001	0.0001	0.0004

TANKS 4.0.9d
Emissions Report - Detail Format
Tank Indentification and Physical Characteristics

Identification

User Identification:	24-88
City:	Lafourche Parish
State:	Louisiana
Company:	LOOP LLC
Type of Tank:	Horizontal Tank
Description:	Tank 2 Operations Center

Tank Dimensions

Shell Length (ft):		11.00
Diameter (ft):		4.00
Volume (gallons):		1,000.00
Turnovers:		9.00
Net Throughput(gal/yr):		9,000.00
Is Tank Heated (y/n):	N	
Is Tank Underground (y/n):	N	

Paint Characteristics

Shell Color/Shade:	White/White
Shell Condition	Good

Breather Vent Settings

Vacuum Settings (psig):	0.00
Pressure Settings (psig)	0.00

Meterological Data used in Emissions Calculations: New Orleans, Louisiana (Avg Atmospheric Pressure = 14.75 psia)

TANKS 4.0.9d
Emissions Report - Detail Format
Liquid Contents of Storage Tank

24-88 - Horizontal Tank
Lafourche Parish, Louisiana

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Gasoline (RVP 13)	All	69.99	64.84	75.14	68.06	8.3423	7.5979	9.1432	62.0000			92.00	Option 4: RVP=13, ASTM Slope=3
1,2,4-Trimethylbenzene						0.0302	0.0247	0.0367	120.1900	0.0250	0.0001	120.19	Option 2: A=7.04383, B=1573.267, C=208.56
Benzene						1.5308	1.3336	1.7516	78.1100	0.0180	0.0049	78.11	Option 2: A=6.905, B=1211.033, C=220.79
Cyclohexane						1.5780	1.3791	1.8000	84.1600	0.0024	0.0007	84.16	Option 2: A=6.841, B=1201.53, C=222.65
Ethylbenzene						0.1524	0.1282	0.1804	106.1700	0.0140	0.0004	106.17	Option 2: A=6.975, B=1424.255, C=213.21
Hexane (-n)						2.4667	2.1671	2.7992	86.1700	0.0100	0.0044	86.17	Option 2: A=6.876, B=1171.17, C=224.41
Isooctane									114.2200	0.0400	0.0000	114.22	
Isopropyl benzene						0.0693	0.0575	0.0831	120.2000	0.0050	0.0001	120.20	Option 2: A=6.93666, B=1460.793, C=207.78
Toluene						0.4474	0.3832	0.5204	92.1300	0.0700	0.0056	92.13	Option 2: A=6.954, B=1344.8, C=219.48
Unidentified Components						10.7314	10.7060	10.7107	61.6765	0.7456	0.9823	89.36	
Xylene (-m)						0.1273	0.1069	0.1510	106.1700	0.0700	0.0016	106.17	Option 2: A=7.009, B=1462.266, C=215.11

TANKS 4.0.9d
Emissions Report - Detail Format
Detail Calculations (AP-42)

24-88 - Horizontal Tank
Lafourche Parish, Louisiana

Annual Emission Calcaulations	
Standing Losses (lb):	434.8189
Vapor Space Volume (cu ft):	88.0446
Vapor Density (lb/cu ft):	0.0910
Vapor Space Expansion Factor:	0.2802
Vented Vapor Saturation Factor:	0.5307
Tank Vapor Space Volume:	
Vapor Space Volume (cu ft):	88.0446
Tank Diameter (ft):	4.0000
Effective Diameter (ft):	7.4867
Vapor Space Outage (ft):	2.0000
Tank Shell Length (ft):	11.0000
Vapor Density	
Vapor Density (lb/cu ft):	0.0910
Vapor Molecular Weight (lb/lb-mole):	62.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	8.3423
Daily Avg. Liquid Surface Temp. (deg. R):	529.6574
Daily Average Ambient Temp. (deg. F):	68.0375
Ideal Gas Constant R (psia cuft / (lb-mol-deg R)):	10.731
Liquid Bulk Temperature (deg. R):	527.7275
Tank Paint Solar Absorptance (Shell):	0.1700
Daily Total Solar Insulation Factor (Btu/sqft day):	1,443.5256
Vapor Space Expansion Factor	
Vapor Space Expansion Factor:	0.2802
Daily Vapor Temperature Range (deg. R):	20.5932
Daily Vapor Pressure Range (psia):	1.5452
Breather Vent Press. Setting Range(psia):	0.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	8.3423
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	7.5979
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	9.1432
Daily Avg. Liquid Surface Temp. (deg R):	529.6574
Daily Min. Liquid Surface Temp. (deg R):	524.5091
Daily Max. Liquid Surface Temp. (deg R):	534.8057
Daily Ambient Temp. Range (deg. R):	19.0583
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor:	0.5307
Vapor Pressure at Daily Average Liquid: Surface Temperature (psia):	8.3423
Vapor Space Outage (ft):	2.0000
Working Losses (lb):	110.8334
Vapor Molecular Weight (lb/lb-mole):	62.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	8.3423
Annual Net Throughput (gal/yr.):	9,000.0000

Annual Turnovers:	9.0000
Turnover Factor:	1.0000
Tank Diameter (ft):	4.0000
Working Loss Product Factor:	1.0000
Total Losses (lb):	545.6523

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: Annual

24-88 - Horizontal Tank
Lafourche Parish, Louisiana

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Gasoline (RVP 13)	110.83	434.82	545.65
Hexane (-n)	0.49	1.91	2.39
Benzene	0.54	2.13	2.67
Isooctane	0.00	0.00	0.00
Toluene	0.62	2.42	3.04
Ethylbenzene	0.04	0.17	0.21
Xylene (-m)	0.18	0.69	0.87
Isopropyl benzene	0.01	0.03	0.03
1,2,4-Trimethylbenzene	0.01	0.06	0.07
Cyclohexane	0.07	0.29	0.37
Unidentified Components	108.87	427.13	536.00

Potential to Emit

LOOP LLC Port Complex
Lafourche Parish, Louisiana

Source ID: **EQT018**
35-88 Clovelly Dome - Fire School Pump

Given:
Brake Horsepower 400 hp
Operation Time 500 hrs

Calculation Methodology:
Average Hourly Rate [lb/hr] = Horsepower [hp] x AP-42 Emission Factor [lb/hp-hr]
Max Hourly Rate [lb/hr] = Average Hourly Rate [lb/hr]
Annual Emission Rate [tpy] = Average Hourly Rate [lb/hr] / Conversion Factor [2000 lb/ton] x Annual Operating Hours

Reference:
EPA AP-42 Chapter 3.3 Gasoline and Diesel Industrial Engines, Table 3.3-1, Table 3.3-2, October 1996

Emission Calculation:

Pollutant	Emission Factor [lb/hp-hr]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
PM_{10}	0.0022	0.88	0.88	0.22
SO_2	0.00205	0.82	0.82	0.21
NO_x	0.031	12.40	12.40	3.10
CO	0.00668	2.67	2.67	0.67
Total VOC	0.00247	0.99	0.99	0.25

VOC TAP Speciation[1]	Emission Factor[2] [lb/hp-hr]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
Acetaldehyde	5.37E-06	0.002	0.002	0.001
Benzene	6.53E-06	0.003	0.003	0.001
Formaldehyde	8.26E-06	0.003	0.003	0.001
Toluene	2.86E-06	0.001	0.001	0.000
Xylenes	2.00E-06	0.001	0.001	0.000

Notes:
(1) TAP Speciation selected from AP-42 Chapter 3, Table 3.3-2 with exponent factor greater than E-04.
(2) AP-42 Chapter 3 uses an average brake-specific fuel consumption of 7,000 Btu/hp-hr to convert from lb/MMBtu to lb/hp-hr.

Potential to Emit

LOOP LLC Port Complex
Lafourche Parish, Louisiana

Source ID: **EQT019**
38-91 Clovelly Dome - Operations Center Fire Pump

Given:
Brake Horsepower 500 hp
Operation Time 500 hrs

Calculation Methodology:
Average Hourly Rate [lb/hr] = Horsepower [hp] x AP-42 Emission Factor [lb/hp-hr]
Max Hourly Rate [lb/hr] = Average Hourly Rate [lb/hr]
Annual Emission Rate [tpy] = Average Hourly Rate [lb/hr] / Conversion Factor [2000 lb/ton] x Annual Operating Hours

Reference:
EPA AP-42 Chapter 3.3 Gasoline and Diesel Industrial Engines, Table 3.3-1, Table 3.3-2, October 1996

Emission Calculation:

Pollutant	Emission Factor [lb/hp-hr]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
PM_{10}	0.0022	1.10	1.10	0.28
SO_2	0.00205	1.03	1.03	0.26
NO_x	0.031	15.50	15.50	3.88
CO	0.00668	3.34	3.34	0.84
Total VOC	0.00247	1.24	1.24	0.31

VOC TAP Speciation[1]	Emission Factor[2] [lb/hp-hr]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
Acetaldehyde	5.37E-06	0.003	0.003	0.001
Benzene	6.53E-06	0.003	0.003	0.001
Formaldehyde	8.26E-06	0.004	0.004	0.001
Toluene	2.86E-06	0.001	0.001	0.000
Xylenes	2.00E-06	0.001	0.001	0.000

Notes:
(1) TAP Speciation selected from AP-42 Chapter 3, Table 3.3-2 with exponent factor greater than E-04.
(2) AP-42 Chapter 3 uses an average brake-specific fuel consumption of 7,000 Btu/hp-hr to convert from lb/MMBtu to lb/hp-hr.

Potential to Emit

LOOP LLC Port Complex
Lafourche Parish, Louisiana

Source ID: **EQT020**
5-99 Clovelly Dome - Crude Oil Tank Farm Firewater Pump

Given:
Power Output 1100 hp
Operation Time 500 hrs

Calculation Methodology:
Average Hourly Rate [lb/hr] = Power Output [hp] x AP-42 Emission Factor [lb/hp-hr]
Max Hourly Rate [lb/hr] = Average Hourly Rate [lb/hr]
Annual Emission Rate [tpy] = Average Hourly Rate [lb/hr] / Conversion Factor [2000 lb/ton] x Annual Operating Hours

Reference:
Vendor Data
EPA AP-42 Chapter 3.4 Large Stationary and All Stationary Dual-fuel Engines, Table 3.4-1, Table 3.4-3, October 1996

Emission Calculation:

Pollutant	Emission Factor [lb/hr]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
PM_{10}	0.18	0.18	0.18	0.05
SO_2[1] [lb/hp-hr]	0.0004	0.44	0.44	0.11
NO_x	28.92	28.92	28.92	7.23
CO	1.34	1.34	1.34	0.34
Total VOC	0.45	0.45	0.45	0.11

VOC TAP Speciation[2]	Emission Factor[3] [lb/hp-hr]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
Benzene	0.0000054	0.006	0.006	0.001
Toluene	0.0000020	0.002	0.002	0.001
Xylenes	0.0000014	0.001	0.001	0.000

Notes:
(1) As guided by AP-42 Chapter 3, Table 3.4-1, SO_2 Emission Factor is 0.00809*S lb/MMBtu for diesel engines; S = sulfur content % = 0.05.
(2) TAP Speciation selected from AP-42 Chapter 3, Table 3.4-3 with exponent factor greater than E-04.
(3) AP-42 Chapter 3 uses an average brake-specific fuel consumption of 7,000 Btu/hp-hr to convert from lb/MMBtu to lb/hp-hr.

Potential to Emit

LOOP LLC Port Complex
Lafourche Parish, Louisiana

Source ID: **EQT021**
1-07 470 bhp Emergency Generator (Small Boat Harbor)

Given:
Brake Horsepower 470 bhp
Operation Time 500 hrs

Calculation Methodology:
Average Hourly Rate [lb/hr] = Horsepower [hp] x AP-42 Emission Factor [lb/hp-hr]
Max Hourly Rate [lb/hr] = Average Hourly Rate [lb/hr]
Annual Emission Rate [tpy] = Average Hourly Rate [lb/hr] / Conversion Factor [2000 lb/ton] x Annual Operating Hours

Reference:
EPA AP-42 Chapter 3.3 Gasoline and Diesel Industrial Engines, Table 3.3-1, Table 3.3-2, October 1996

Emission Calculation:

Pollutant	Emission Factor [lb/hp-hr]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
PM_{10}	0.0022	1.03	1.03	0.26
SO_2	0.00205	0.96	0.96	0.24
NO_x	0.031	14.57	14.57	3.64
CO	0.00668	3.14	3.14	0.78
Total VOC	0.00247	1.16	1.16	0.29

VOC TAP Speciation[(1)]	Emission Factor[(1)] [lb/hp-hr]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
Acetaldehyde	5.37E-06	0.003	0.003	0.001
Benzene	6.53E-06	0.003	0.003	0.001
Formaldehyde	8.26E-06	0.004	0.004	0.001
Toluene	2.86E-06	0.001	0.001	0.000
Xylenes	2.00E-06	0.001	0.001	0.000

Notes:
(1) TAP Speciation selected from AP-42 Chapter 3, Table 3.3-2 with exponent factor greater than E-04 and converted using 7,000 Btu/hp-hr.

Potential to Emit

LOOP LLC Port Complex
Lafourche Parish, Louisiana

Source ID: **EQT022**
2-07 470 bhp Emergency Generator (Tank Facility)

Given:
Brake Horsepower 470 bhp
Operation Time 500 hrs

Calculation Methodology:
Average Hourly Rate [lb/hr] = Horsepower [hp] x AP-42 Emission Factor [lb/hp-hr]
Max Hourly Rate [lb/hr] = Average Hourly Rate [lb/hr]
Annual Emission Rate [tpy] = Average Hourly Rate [lb/hr] / Conversion Factor [2000 lb/ton] x Annual Operating Hours

Reference:
EPA AP-42 Chapter 3.3 Gasoline and Diesel Industrial Engines, Table 3.3-1, Table 3.3-2, October 1996

Emission Calculation:

Pollutant	Emission Factor [lb/hp-hr]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
PM_{10}	0.0022	1.03	1.03	0.26
SO_2	0.00205	0.96	0.96	0.24
NO_x	0.031	14.57	14.57	3.64
CO	0.00668	3.14	3.14	0.78
Total VOC	0.00247	1.16	1.16	0.29

VOC TAP Speciation[(1)]	Emission Factor[(1)] [lb/hp-hr]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
Acetaldehyde	5.37E-06	0.003	0.003	0.001
Benzene	6.53E-06	0.003	0.003	0.001
Formaldehyde	8.26E-06	0.004	0.004	0.001
Toluene	2.86E-06	0.001	0.001	0.000
Xylenes	2.00E-06	0.001	0.001	0.000

Notes:
(1) TAP Speciation selected from AP-42 Chapter 3, Table 3.3-2 with exponent factor greater than E-04 and converted using 7,000 Btu/hp-hr.

Potential to Emit

LOOP LLC Port Complex
Lafourche Parish, Louisiana

Source ID: **EQT023**
3-07 671 bhp Emergency Generator (Clovelly Dome)

Given:
Brake Horsepower 671 bhp
Operation Time 500 hrs

Calculation Methodology:
Average Hourly Rate [lb/hr] = Horsepower [hp] x AP-42 Emission Factor [lb/hp-hr]
Max Hourly Rate [lb/hr] = Average Hourly Rate [lb/hr]
Annual Emission Rate [tpy] = Average Hourly Rate [lb/hr] / Conversion Factor [2000 lb/ton] x Annual Operating Hours

Reference:
EPA AP-42 Chapter 3.4 Large Stationary and All Stationary Dual-fuel Engines, Table 3.4-1, Table 3.4-3, October 1996

Emission Calculation:

Pollutant	Emission Factor [lb/hp-hr]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
PM_{10}	0.0007	0.47	0.47	0.12
SO_2 [1)]	0.00040	0.27	0.27	0.07
NO_x	0.024	16.10	16.10	4.03
CO	0.0055	3.69	3.69	0.92
Total VOC	0.00071	0.47	0.47	0.12

VOC TAP Speciation[(2)]	Emission Factor[(3)] [lb/hp-hr]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
Benzene	5.43E-06	0.004	0.004	0.001
Toluene	1.97E-06	0.001	0.001	0.000
Xylenes	1.35E-06	0.001	0.001	0.000

Notes:
(1) As guided by AP-42 Chapter 3, Table 3.4-1, SO_2 Emission Factor is 0.00809*S lb/MMBtu for diesel engines; S = sulfur content % = 0.05.
(2) TAP Speciation selected from AP-42 Chapter 3, Table 3.4-3 with exponent factor greater than E-04.
(3) AP-42 Chapter 3 uses an average brake-specific fuel consumption of 7,000 Btu/hp-hr to convert from lb/MMBtu to lb/hp-hr.

Potential to Emit

LOOP LLC Port Complex
Lafourche Parish, Louisiana

Source ID: **EQT024**
4-07 671 bhp Emergency Generator (Clovelly Control Room)

Given:
Brake Horsepower 671 bhp
Operation Time 500 hrs

Calculation Methodology:
Average Hourly Rate [lb/hr] = Horsepower [hp] x AP-42 Emission Factor [lb/hp-hr]
Max Hourly Rate [lb/hr] = Average Hourly Rate [lb/hr]
Annual Emission Rate [tpy] = Average Hourly Rate [lb/hr] / Conversion Factor [2000 lb/ton] x Annual Operating Hours

Reference:
EPA AP-42 Chapter 3.4 Large Stationary and All Stationary Dual-fuel Engines, Table 3.4-1, Table 3.4-3, October 1996

Emission Calculation:

Pollutant	Emission Factor [lb/hp-hr]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
PM_{10}	0.0007	0.47	0.47	0.12
SO_2 [1)]	0.00040	0.27	0.27	0.07
NO_x	0.024	16.10	16.10	4.03
CO	0.0055	3.69	3.69	0.92
Total VOC	0.00071	0.47	0.47	0.12

VOC TAP Speciation[(2)]	Emission Factor[(3)] [lb/hp-hr]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
Benzene	5.43E-06	0.004	0.004	0.001
Toluene	1.97E-06	0.001	0.001	0.000
Xylenes	1.35E-06	0.001	0.001	0.000

Notes:
(1) As guided by AP-42 Chapter 3, Table 3.4-1, SO_2 Emission Factor is 0.00809*S lb/MMBtu for diesel engines; S = sulfur content % = 0.05.
(2) TAP Speciation selected from AP-42 Chapter 3, Table 3.4-3 with exponent factor greater than E-04.
(3) AP-42 Chapter 3 uses an average brake-specific fuel consumption of 7,000 Btu/hp-hr to convert from lb/MMBtu to lb/hp-hr.

Potential to Emit

LOOP LLC Port Complex
Lafourche Parish, Louisiana

Source ID: **EQT025**
5-07 268 bhp Emergency Generator (OC Warehouse)

Given:
Brake Horsepower 268 bhp
Operation Time 500 hrs

Calculation Methodology:
Average Hourly Rate [lb/hr] = Horsepower [hp] x AP-42 Emission Factor [lb/hp-hr]
Max Hourly Rate [lb/hr] = Average Hourly Rate [lb/hr]
Annual Emission Rate [tpy] = Average Hourly Rate [lb/hr] / Conversion Factor [2000 lb/ton] x Annual Operating Hours

Reference:
EPA AP-42 Chapter 3.3 Gasoline and Diesel Industrial Engines, Table 3.3-1, Table 3.3-2, October 1996

Emission Calculation:

Pollutant	Emission Factor [lb/hp-hr]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
PM_{10}	0.0022	0.59	0.59	0.15
SO_2	0.00205	0.55	0.55	0.14
NO_x	0.031	8.31	8.31	2.08
CO	0.00668	1.79	1.79	0.45
Total VOC	0.00247	0.66	0.66	0.17

VOC TAP Speciation[(1)]	Emission Factor[(1)] [lb/hp-hr]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
Acetaldehyde	5.37E-06	0.001	0.001	0.000
Benzene	6.53E-06	0.002	0.002	0.000
Formaldehyde	8.26E-06	0.002	0.002	0.001
Toluene	2.86E-06	0.001	0.001	0.000
Xylenes	2.00E-06	0.001	0.001	0.000

Notes:
(1) TAP Speciation selected from AP-42 Chapter 3, Table 3.3-2 with exponent factor greater than E-04 and converted using 7,000 Btu/hp-hr.

Potential to Emit

LOOP LLC Port Complex
Lafourche Parish, Louisiana

Source ID: **EQT026**
6-07 168 bhp Emergency Generator (LOCAP)

Given:
Brake Horsepower 168 bhp
Operation Time 500 hrs

Calculation Methodology:
Average Hourly Rate [lb/hr] = Horsepower [hp] x AP-42 Emission Factor [lb/hp-hr]
Max Hourly Rate [lb/hr] = Average Hourly Rate [lb/hr]
Annual Emission Rate [tpy] = Average Hourly Rate [lb/hr] / Conversion Factor [2000 lb/ton] x Annual Operating Hours

Reference:
EPA AP-42 Chapter 3.3 Gasoline and Diesel Industrial Engines, Table 3.3-1, Table 3.3-2, October 1996

Emission Calculation:

Pollutant	Emission Factor [lb/hp-hr]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
PM_{10}	0.0022	0.37	0.37	0.09
SO_2	0.00205	0.34	0.34	0.09
NO_x	0.031	5.21	5.21	1.30
CO	0.00668	1.12	1.12	0.28
Total VOC	0.00247	0.41	0.41	0.10

VOC TAP Speciation[(1)]	Emission Factor[(1)] [lb/hp-hr]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
Acetaldehyde	5.37E-06	0.001	0.001	0.000
Benzene	6.53E-06	0.001	0.001	0.000
Formaldehyde	8.26E-06	0.001	0.001	0.000
Toluene	2.86E-06	0.000	0.000	0.000
Xylenes	2.00E-06	0.000	0.000	0.000

Notes:
(1) TAP Speciation selected from AP-42 Chapter 3, Table 3.3-2 with exponent factor greater than E-04 and converted using 7,000 Btu/hp-hr.

Potential to Emit

LOOP LLC Port Complex
Lafourche Parish, Louisiana

Source ID: **FUG001**
10-78 Fugitive Emissions

Given:

Component Type	Service	Component Count
valves	Heavy liquid (HL)	150
pump seals	Heavy liquid (HL)	120
flanges	Heavy liquid (HL)	930

Calculation Methodology:
VOC Average Hourly Rate [lb/hr] = API Emission Factor [lb/component-day] x Component Count / Conversion Factor [24 hrs/day]
VOC TAP Speciate Hourly Rate [lb/hr] = Liquid Mass Fraction x Total VOC Average Hourly Rate [lb/hr]
Max Hourly Rate [lb/hr] = Average Hourly Rate [lb/hr]
Annual Emission Rate [tpy] = Average Hourly Rate [lb/hr] / Conversion Factor [2000 lb/ton] x Annual Operating Hours

Reference:
Emission Factors for Oil and Gas Production Operations, Table 8, Publication Number 4615, American Petroleum Institute, January 1995

Emission Calculation:

Component Type	Heavy Crude Emission Factor [lb/component-day]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
valves	0.000013	0.0001	0.0001	0.0004
pump seals	NA	--	--	--
flanges	0.000022	0.0009	0.0009	0.0037
	Total VOC	**0.0009**	**0.0009**	**0.0041**

VOC TAP Speciation	Liquid Mass Fraction[(1)]	Average Hourly Rate [lb/hr]	Max Hourly Rate [lb/hr]	Annual Emission Rate [tpy]
Benzene	0.0060	0.000006	0.000006	0.00002
Cumene (Isopropyl benzene)	0.0010	0.000001	0.000001	0.000004
Ethylbenzene	0.0040	0.000004	0.000004	0.00002
n-Hexane	0.0040	0.000004	0.000004	0.00002
Toluene	0.0100	0.000009	0.000009	0.00004
Xylenes	0.0140	0.000013	0.000013	0.00006

Notes:
(1) VOC TAP Speciation Profile from TANKS 4.09.d for Crude Oil (RVP 8).

Potential to Emit

LOOP LLC Port Complex
Lafourche Parish, Louisiana

Source ID: **Insignificant Tanks**
Facility-wide

Calculation Methodology:
EPA *TANKS 4.0.9d Program Software*
Annual Emission Rate [tpy] = TANKS Emission Report / Conversion Factor [2000 lb/ton]

Emission Calculation and Summary:

Tank ID	Tank Description	Tank Capacity [gallons]	Tank Contents	TANKS Emission Report Total VOC [lbs/yr]	Annual Emission Rate [tpy]
2-78	Fuel Tank for Emergency Generator (Clovelly Dome)	8,200	Diesel	18.20	0.01
22-78	Emer. Crude Transfer Pump Fuel Tank (Clovelly Dome)	8,200	Diesel	2.29	0.001
25-88	Tank 3 Operations Center Fuel Tank (Clovelly Dome)	550	Diesel	0.16	0.0001
26-88	Tank 4 Operations Center Tank (Clovelly Dome)	4,000	Diesel	1.16	0.0006
27-88	Tank 5 Fourchon Booster Station Tank	1,000	Diesel	0.30	0.0002
28-88	Tank 6 Fourchon Booster Station Emer. Generator Fuel Tank	322	Diesel	0.11	0.0001
29-88	Tank 7 Fourchon Booster Station Dock Fuel Tank	560	Diesel	0.16	0.0001
30-88	Tank 8 Clovelly Day Tank for Fire Pump	80	Diesel	0.02	0.00001
31-88	Tank 9 Clovelly Day Tank for Generator	116	Diesel	0.03	0.00002
32-88	Tank 10 Clovelly Underground Slop Oil Tank by Lab	2,000	Slop Oil (Crude)	17.82	0.01
34-88	Tank 12 Small Boat Harbor Tank	260	Diesel	0.07	0.00004
36-89	Day Tank for Operations Center Standby Generator (Clovelly Dome)	94	Diesel	0.06	0.00003
37-91	Small Boat Harbor Diesel Tank	564	Diesel	0.20	0.0001

INSIGNIFICANT ACTIVITIES
TANKS 4.0.9d REPORTS

TANKS 4.0.9d
Emissions Report - Summary Format
Total Emissions Summaries - All Tanks in Report

Emissions Report for: Annual

Tank Identification				Losses (lbs)
22-78	LOOP LLC	Horizontal Tank	Lafourche Parish, Louisiana	2.29
25-88	LOOP LLC	Horizontal Tank	Lafourche Parish, Louisiana	0.16
26-88	LOOP LLC	Horizontal Tank	Lafourche Parish, Louisiana	1.16
2-78	LOOP LLC	Horizontal Tank	Lafourche Parish, Louisiana	18.20
27-88	LOOP LLC	Horizontal Tank	Lafourche Parish, Louisiana	0.30
28-88	LOOP LLC	Vertical Fixed Roof Tank	Lafourche Parish, Louisiana	0.11
29-88	LOOP LLC	Horizontal Tank	Lafourche Parish, Louisiana	0.16
30-88	LOOP LLC	Vertical Fixed Roof Tank	Lafourche Parish, Louisiana	0.02
31-88	LOOP LLC	Vertical Fixed Roof Tank	Lafourche Parish, Louisiana	0.03
32-88	LOOP LLC	Horizontal Tank	Lafourche Parish, Louisiana	17.82
34-88	LOOP LLC	Horizontal Tank	Lafourche Parish, Louisiana	0.07
36-89	LOOP LLC	Vertical Fixed Roof Tank	Lafourche Parish, Louisiana	0.06
37-91	LOOP LLC	Horizontal Tank	Lafourche Parish, Louisiana	0.20
Total Emissions for all Tanks:				40.57

TANKS 4.0.9d
Emissions Report - Summary Format
Tank Indentification and Physical Characteristics

Identification

User Identification:	2-78
City:	Lafourche Parish
State:	Louisiana
Company:	LOOP LLC
Type of Tank:	Horizontal Tank
Description:	Diesel Fuel Tank for Emergency Generators

Tank Dimensions

Shell Length (ft):		22.00
Diameter (ft):		8.00
Volume (gallons):		8,200.00
Turnovers:		243.90
Net Throughput(gal/yr):		2,000,000.00
Is Tank Heated (y/n):	N	
Is Tank Underground (y/n):	N	

Paint Characteristics

Shell Color/Shade:	White/White
Shell Condition	Good

Breather Vent Settings

Vacuum Settings (psig):	0.00
Pressure Settings (psig)	0.00

Meterological Data used in Emissions Calculations: New Orleans, Louisiana (Avg Atmospheric Pressure = 14.75 psia)

TANKS 4.0.9d
Emissions Report - Summary Format
Liquid Contents of Storage Tank

2-78 - Horizontal Tank
Lafourche Parish, Louisiana

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Distillate fuel oil no. 2	All	69.99	64.84	75.14	68.06	0.0090	0.0077	0.0105	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009
1,2,4-Trimethylbenzene						0.0302	0.0247	0.0367	120.1900	0.0100	0.0485	120.19	Option 2: A=7.04383, B=1573.267, C=208.56
Benzene						1.5308	1.3336	1.7516	78.1100	0.0000	0.0020	78.11	Option 2: A=6.905, B=1211.033, C=220.79
Ethylbenzene						0.1524	0.1282	0.1804	106.1700	0.0001	0.0032	106.17	Option 2: A=6.975, B=1424.255, C=213.21
Hexane (-n)						2.4667	2.1671	2.7992	86.1700	0.0000	0.0004	86.17	Option 2: A=6.876, B=1171.17, C=224.41
Toluene						0.4474	0.3832	0.5204	92.1300	0.0003	0.0230	92.13	Option 2: A=6.954, B=1344.8, C=219.48
Unidentified Components						0.0077	0.0070	0.0074	134.5121	0.9866	0.8635	189.60	
Xylene (-m)						0.1273	0.1069	0.1510	106.1700	0.0029	0.0594	106.17	Option 2: A=7.009, B=1462.266, C=215.11

TANKS 4.0.9d
Emissions Report - Summary Format
Individual Tank Emission Totals

Emissions Report for: Annual

2-78 - Horizontal Tank
Lafourche Parish, Louisiana

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Distillate fuel oil no. 2	16.13	2.06	18.20
Hexane (-n)	0.01	0.00	0.01
Benzene	0.03	0.00	0.04
Toluene	0.37	0.05	0.42
Ethylbenzene	0.05	0.01	0.06
Xylene (-m)	0.96	0.12	1.08
1,2,4-Trimethylbenzene	0.78	0.10	0.88
Unidentified Components	13.93	1.78	15.71

TANKS 4.0.9d
Emissions Report - Summary Format
Tank Indentification and Physical Characteristics

Identification

User Identification:	22-78
City:	Lafourche Parish
State:	Louisiana
Company:	LOOP LLC
Type of Tank:	Horizontal Tank
Description:	Emergency Crude Transfer Pump Diesel Fuel Tank

Tank Dimensions

Shell Length (ft):		22.00
Diameter (ft):		8.00
Volume (gallons):		8,200.00
Turnovers:		0.00
Net Throughput(gal/yr):		8,000.00
Is Tank Heated (y/n):	N	
Is Tank Underground (y/n):	N	

Paint Characteristics

Shell Color/Shade:	White/White
Shell Condition	Good

Breather Vent Settings

Vacuum Settings (psig):	0.00
Pressure Settings (psig)	0.00

Meterological Data used in Emissions Calculations: New Orleans, Louisiana (Avg Atmospheric Pressure = 14.75 psia)

TANKS 4.0.9d
Emissions Report - Summary Format
Liquid Contents of Storage Tank

22-78 - Horizontal Tank
Lafourche Parish, Louisiana

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Distillate fuel oil no. 2	All	69.99	64.84	75.14	68.06	0.0090	0.0077	0.0105	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009
1,2,4-Trimethylbenzene						0.0302	0.0247	0.0367	120.1900	0.0100	0.0485	120.19	Option 2: A=7.04383, B=1573.267, C=208.56
Benzene						1.5308	1.3336	1.7516	78.1100	0.0000	0.0020	78.11	Option 2: A=6.905, B=1211.033, C=220.79
Ethylbenzene						0.1524	0.1282	0.1804	106.1700	0.0001	0.0032	106.17	Option 2: A=6.975, B=1424.255, C=213.21
Hexane (-n)						2.4667	2.1671	2.7992	86.1700	0.0000	0.0004	86.17	Option 2: A=6.876, B=1171.17, C=224.41
Toluene						0.4474	0.3832	0.5204	92.1300	0.0003	0.0230	92.13	Option 2: A=6.954, B=1344.8, C=219.48
Unidentified Components						0.0077	0.0070	0.0074	134.5121	0.9866	0.8635	189.60	
Xylene (-m)						0.1273	0.1069	0.1510	106.1700	0.0029	0.0594	106.17	Option 2: A=7.009, B=1462.266, C=215.11

TANKS 4.0.9d
Emissions Report - Summary Format
Individual Tank Emission Totals

Emissions Report for: Annual

22-78 - Horizontal Tank
Lafourche Parish, Louisiana

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Distillate fuel oil no. 2	0.22	2.06	2.29
Hexane (-n)	0.00	0.00	0.00
Benzene	0.00	0.00	0.00
Toluene	0.01	0.05	0.05
Ethylbenzene	0.00	0.01	0.01
Xylene (-m)	0.01	0.12	0.14
1,2,4-Trimethylbenzene	0.01	0.10	0.11
Unidentified Components	0.19	1.78	1.97

TANKS 4.0.9d
Emissions Report - Summary Format
Tank Indentification and Physical Characteristics

Identification

User Identification:	25-88
City:	Lafourche Parish
State:	Louisiana
Company:	LOOP LLC
Type of Tank:	Horizontal Tank
Description:	Tank 3 Operations Center Diesel Tank

Tank Dimensions

Shell Length (ft):		6.00
Diameter (ft):		4.00
Volume (gallons):		550.00
Turnovers:		1.00
Net Throughput(gal/yr):		550.00
Is Tank Heated (y/n):	N	
Is Tank Underground (y/n):	N	

Paint Characteristics

Shell Color/Shade:	White/White
Shell Condition	Good

Breather Vent Settings

Vacuum Settings (psig):	0.00
Pressure Settings (psig)	0.00

Meterological Data used in Emissions Calculations: New Orleans, Louisiana (Avg Atmospheric Pressure = 14.75 psia)

TANKS 4.0.9d
Emissions Report - Summary Format
Liquid Contents of Storage Tank

25-88 - Horizontal Tank
Lafourche Parish, Louisiana

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Distillate fuel oil no. 2	All	69.99	64.84	75.14	68.06	0.0090	0.0077	0.0105	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009
1,2,4-Trimethylbenzene						0.0302	0.0247	0.0367	120.1900	0.0100	0.0485	120.19	Option 2: A=7.04383, B=1573.267, C=208.56
Benzene						1.5308	1.3336	1.7516	78.1100	0.0000	0.0020	78.11	Option 2: A=6.905, B=1211.033, C=220.79
Ethylbenzene						0.1524	0.1282	0.1804	106.1700	0.0001	0.0032	106.17	Option 2: A=6.975, B=1424.255, C=213.21
Hexane (-n)						2.4667	2.1671	2.7992	86.1700	0.0000	0.0004	86.17	Option 2: A=6.876, B=1171.17, C=224.41
Toluene						0.4474	0.3832	0.5204	92.1300	0.0003	0.0230	92.13	Option 2: A=6.954, B=1344.8, C=219.48
Unidentified Components						0.0077	0.0070	0.0074	134.5121	0.9866	0.8635	189.60	
Xylene (-m)						0.1273	0.1069	0.1510	106.1700	0.0029	0.0594	106.17	Option 2: A=7.009, B=1462.266, C=215.11

TANKS 4.0.9d
Emissions Report - Summary Format
Individual Tank Emission Totals

Emissions Report for: Annual

25-88 - Horizontal Tank
Lafourche Parish, Louisiana

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Distillate fuel oil no. 2	0.02	0.14	0.16
Hexane (-n)	0.00	0.00	0.00
Benzene	0.00	0.00	0.00
Toluene	0.00	0.00	0.00
Ethylbenzene	0.00	0.00	0.00
Xylene (-m)	0.00	0.01	0.01
1,2,4-Trimethylbenzene	0.00	0.01	0.01
Unidentified Components	0.01	0.12	0.13

TANKS 4.0.9d
Emissions Report - Summary Format
Tank Indentification and Physical Characteristics

Identification

User Identification:	26-88
City:	Lafourche Parish
State:	Louisiana
Company:	LOOP LLC
Type of Tank:	Horizontal Tank
Description:	Tank 4 Operations Center Diesel Tank

Tank Dimensions

Shell Length (ft):		10.00
Diameter (ft):		8.00
Volume (gallons):		4,000.00
Turnovers:		2.00
Net Throughput(gal/yr):		8,000.00
Is Tank Heated (y/n):	N	
Is Tank Underground (y/n):	N	

Paint Characteristics

Shell Color/Shade:	White/White
Shell Condition	Good

Breather Vent Settings

Vacuum Settings (psig):	0.00
Pressure Settings (psig)	0.00

Meterological Data used in Emissions Calculations: New Orleans, Louisiana (Avg Atmospheric Pressure = 14.75 psia)

TANKS 4.0.9d
Emissions Report - Summary Format
Liquid Contents of Storage Tank

26-88 - Horizontal Tank
Lafourche Parish, Louisiana

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Distillate fuel oil no. 2	All	69.99	64.84	75.14	68.06	0.0090	0.0077	0.0105	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009
1,2,4-Trimethylbenzene						0.0302	0.0247	0.0367	120.1900	0.0100	0.0485	120.19	Option 2: A=7.04383, B=1573.267, C=208.56
Benzene						1.5308	1.3336	1.7516	78.1100	0.0000	0.0020	78.11	Option 2: A=6.905, B=1211.033, C=220.79
Ethylbenzene						0.1524	0.1282	0.1804	106.1700	0.0001	0.0032	106.17	Option 2: A=6.975, B=1424.255, C=213.21
Hexane (-n)						2.4667	2.1671	2.7992	86.1700	0.0000	0.0004	86.17	Option 2: A=6.876, B=1171.17, C=224.41
Toluene						0.4474	0.3832	0.5204	92.1300	0.0003	0.0230	92.13	Option 2: A=6.954, B=1344.8, C=219.48
Unidentified Components						0.0077	0.0070	0.0074	134.5121	0.9866	0.8635	189.60	
Xylene (-m)						0.1273	0.1069	0.1510	106.1700	0.0029	0.0594	106.17	Option 2: A=7.009, B=1462.266, C=215.11

TANKS 4.0.9d
Emissions Report - Summary Format
Individual Tank Emission Totals

Emissions Report for: Annual

26-88 - Horizontal Tank
Lafourche Parish, Louisiana

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Distillate fuel oil no. 2	0.22	0.94	1.16
Hexane (-n)	0.00	0.00	0.00
Benzene	0.00	0.00	0.00
Toluene	0.01	0.02	0.03
Ethylbenzene	0.00	0.00	0.00
Xylene (-m)	0.01	0.06	0.07
1,2,4-Trimethylbenzene	0.01	0.05	0.06
Unidentified Components	0.19	0.81	1.00

TANKS 4.0.9d
Emissions Report - Summary Format
Tank Indentification and Physical Characteristics

Identification

User Identification:	27-88
City:	Lafourche Parish
State:	Louisiana
Company:	LOOP LLC
Type of Tank:	Horizontal Tank
Description:	Tank 5 Booster Station Diesel Tank

Tank Dimensions

Shell Length (ft):		11.00
Diameter (ft):		4.00
Volume (gallons):		1,000.00
Turnovers:		1.50
Net Throughput(gal/yr):		1,500.00
Is Tank Heated (y/n):	N	
Is Tank Underground (y/n):	N	

Paint Characteristics

Shell Color/Shade:	White/White
Shell Condition	Good

Breather Vent Settings

Vacuum Settings (psig):	0.00
Pressure Settings (psig)	0.00

Meterological Data used in Emissions Calculations: New Orleans, Louisiana (Avg Atmospheric Pressure = 14.75 psia)

TANKS 4.0.9d
Emissions Report - Summary Format
Liquid Contents of Storage Tank

27-88 - Horizontal Tank
Lafourche Parish, Louisiana

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Distillate fuel oil no. 2	All	69.99	64.84	75.14	68.06	0.0090	0.0077	0.0105	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009
1,2,4-Trimethylbenzene						0.0302	0.0247	0.0367	120.1900	0.0100	0.0485	120.19	Option 2: A=7.04383, B=1573.267, C=208.56
Benzene						1.5308	1.3336	1.7516	78.1100	0.0000	0.0020	78.11	Option 2: A=6.905, B=1211.033, C=220.79
Ethylbenzene						0.1524	0.1282	0.1804	106.1700	0.0001	0.0032	106.17	Option 2: A=6.975, B=1424.255, C=213.21
Hexane (-n)						2.4667	2.1671	2.7992	86.1700	0.0000	0.0004	86.17	Option 2: A=6.876, B=1171.17, C=224.41
Toluene						0.4474	0.3832	0.5204	92.1300	0.0003	0.0230	92.13	Option 2: A=6.954, B=1344.8, C=219.48
Unidentified Components						0.0077	0.0070	0.0074	134.5121	0.9866	0.8635	189.60	
Xylene (-m)						0.1273	0.1069	0.1510	106.1700	0.0029	0.0594	106.17	Option 2: A=7.009, B=1462.266, C=215.11

TANKS 4.0.9d
Emissions Report - Summary Format
Individual Tank Emission Totals

Emissions Report for: Annual

27-88 - Horizontal Tank
Lafourche Parish, Louisiana

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Distillate fuel oil no. 2	0.04	0.26	0.30
Hexane (-n)	0.00	0.00	0.00
Benzene	0.00	0.00	0.00
Toluene	0.00	0.01	0.01
Ethylbenzene	0.00	0.00	0.00
Xylene (-m)	0.00	0.02	0.02
1,2,4-Trimethylbenzene	0.00	0.01	0.01
Unidentified Components	0.04	0.22	0.26

TANKS 4.0.9d
Emissions Report - Summary Format
Tank Indentification and Physical Characteristics

Identification

User Identification:	28-88
City:	Lafourche Parish
State:	Louisiana
Company:	LOOP LLC
Type of Tank:	Vertical Fixed Roof Tank
Description:	Tank 6 Fourchon Booster Station Emergency Generator Diesel Tank

Tank Dimensions

Shell Height (ft):	5.00
Diameter (ft):	3.70
Liquid Height (ft) :	4.00
Avg. Liquid Height (ft):	3.00
Volume (gallons):	321.73
Turnovers:	4.66
Net Throughput(gal/yr):	1,500.00
Is Tank Heated (y/n):	N

Paint Characteristics

Shell Color/Shade:	White/White
Shell Condition	Good
Roof Color/Shade:	White/White
Roof Condition:	Good

Roof Characteristics

Type:	Cone
Height (ft)	0.00
Slope (ft/ft) (Cone Roof)	0.06

Breather Vent Settings

Vacuum Settings (psig):	0.00
Pressure Settings (psig)	0.00

Meterological Data used in Emissions Calculations: New Orleans, Louisiana (Avg Atmospheric Pressure = 14.75 psia)

TANKS 4.0.9d
Emissions Report - Summary Format
Liquid Contents of Storage Tank

28-88 - Vertical Fixed Roof Tank
Lafourche Parish, Louisiana

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Distillate fuel oil no. 2	All	69.99	64.84	75.14	68.06	0.0090	0.0077	0.0105	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009
1,2,4-Trimethylbenzene						0.0302	0.0247	0.0367	120.1900	0.0100	0.0485	120.19	Option 2: A=7.04383, B=1573.267, C=208.56
Benzene						1.5308	1.3336	1.7516	78.1100	0.0000	0.0020	78.11	Option 2: A=6.905, B=1211.033, C=220.79
Ethylbenzene						0.1524	0.1282	0.1804	106.1700	0.0001	0.0032	106.17	Option 2: A=6.975, B=1424.255, C=213.21
Hexane (-n)						2.4667	2.1671	2.7992	86.1700	0.0000	0.0004	86.17	Option 2: A=6.876, B=1171.17, C=224.41
Toluene						0.4474	0.3832	0.5204	92.1300	0.0003	0.0230	92.13	Option 2: A=6.954, B=1344.8, C=219.48
Unidentified Components						0.0077	0.0070	0.0074	134.5121	0.9866	0.8635	189.60	
Xylene (-m)						0.1273	0.1069	0.1510	106.1700	0.0029	0.0594	106.17	Option 2: A=7.009, B=1462.266, C=215.11

TANKS 4.0.9d
Emissions Report - Summary Format
Individual Tank Emission Totals

Emissions Report for: Annual

28-88 - Vertical Fixed Roof Tank
Lafourche Parish, Louisiana

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Distillate fuel oil no. 2	0.04	0.06	0.11
Hexane (-n)	0.00	0.00	0.00
Benzene	0.00	0.00	0.00
Toluene	0.00	0.00	0.00
Ethylbenzene	0.00	0.00	0.00
Xylene (-m)	0.00	0.00	0.01
1,2,4-Trimethylbenzene	0.00	0.00	0.01
Unidentified Components	0.04	0.06	0.09

TANKS 4.0.9d
Emissions Report - Summary Format
Tank Indentification and Physical Characteristics

Identification

User Identification:	29-88
City:	Lafourche Parish
State:	Louisiana
Company:	LOOP LLC
Type of Tank:	Horizontal Tank
Description:	Tank 7 Fourchon Booster Station Dock Diesel Tank

Tank Dimensions

Shell Length (ft):		6.00
Diameter (ft):		4.00
Volume (gallons):		560.00
Turnovers:		1.00
Net Throughput(gal/yr):		560.00
Is Tank Heated (y/n):	N	
Is Tank Underground (y/n):	N	

Paint Characteristics

Shell Color/Shade:	White/White
Shell Condition	Good

Breather Vent Settings

Vacuum Settings (psig):	0.00
Pressure Settings (psig)	0.00

Meterological Data used in Emissions Calculations: New Orleans, Louisiana (Avg Atmospheric Pressure = 14.75 psia)

TANKS 4.0.9d
Emissions Report - Summary Format
Liquid Contents of Storage Tank

29-88 - Horizontal Tank
Lafourche Parish, Louisiana

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Distillate fuel oil no. 2	All	69.99	64.84	75.14	68.06	0.0090	0.0077	0.0105	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009
1,2,4-Trimethylbenzene						0.0302	0.0247	0.0367	120.1900	0.0100	0.0485	120.19	Option 2: A=7.04383, B=1573.267, C=208.56
Benzene						1.5308	1.3336	1.7516	78.1100	0.0000	0.0020	78.11	Option 2: A=6.905, B=1211.033, C=220.79
Ethylbenzene						0.1524	0.1282	0.1804	106.1700	0.0001	0.0032	106.17	Option 2: A=6.975, B=1424.255, C=213.21
Hexane (-n)						2.4667	2.1671	2.7992	86.1700	0.0000	0.0004	86.17	Option 2: A=6.876, B=1171.17, C=224.41
Toluene						0.4474	0.3832	0.5204	92.1300	0.0003	0.0230	92.13	Option 2: A=6.954, B=1344.8, C=219.48
Unidentified Components						0.0077	0.0070	0.0074	134.5121	0.9866	0.8635	189.60	
Xylene (-m)						0.1273	0.1069	0.1510	106.1700	0.0029	0.0594	106.17	Option 2: A=7.009, B=1462.266, C=215.11

TANKS 4.0.9d
Emissions Report - Summary Format
Individual Tank Emission Totals

Emissions Report for: Annual

29-88 - Horizontal Tank
Lafourche Parish, Louisiana

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Distillate fuel oil no. 2	0.02	0.14	0.16
Hexane (-n)	0.00	0.00	0.00
Benzene	0.00	0.00	0.00
Toluene	0.00	0.00	0.00
Ethylbenzene	0.00	0.00	0.00
Xylene (-m)	0.00	0.01	0.01
1,2,4-Trimethylbenzene	0.00	0.01	0.01
Unidentified Components	0.01	0.12	0.14

TANKS 4.0.9d
Emissions Report - Summary Format
Tank Indentification and Physical Characteristics

Identification

User Identification:	30-88
City:	Lafourche Parish
State:	Louisiana
Company:	LOOP LLC
Type of Tank:	Vertical Fixed Roof Tank
Description:	Tank 8 Clovelly Day Tank for Fire Pump

Tank Dimensions

Shell Height (ft):	5.00
Diameter (ft):	1.85
Liquid Height (ft) :	4.00
Avg. Liquid Height (ft):	3.00
Volume (gallons):	80.43
Turnovers:	2.00
Net Throughput(gal/yr):	160.86
Is Tank Heated (y/n):	N

Paint Characteristics

Shell Color/Shade:	White/White
Shell Condition	Good
Roof Color/Shade:	White/White
Roof Condition:	Good

Roof Characteristics

Type:	Cone
Height (ft)	0.00
Slope (ft/ft) (Cone Roof)	0.06

Breather Vent Settings

Vacuum Settings (psig):	0.00
Pressure Settings (psig)	0.00

Meterological Data used in Emissions Calculations: New Orleans, Louisiana (Avg Atmospheric Pressure = 14.75 psia)

TANKS 4.0.9d
Emissions Report - Summary Format
Liquid Contents of Storage Tank

30-88 - Vertical Fixed Roof Tank
Lafourche Parish, Louisiana

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Distillate fuel oil no. 2	All	69.99	64.84	75.14	68.06	0.0090	0.0077	0.0105	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009
1,2,4-Trimethylbenzene						0.0302	0.0247	0.0367	120.1900	0.0100	0.0485	120.19	Option 2: A=7.04383, B=1573.267, C=208.56
Benzene						1.5308	1.3336	1.7516	78.1100	0.0000	0.0020	78.11	Option 2: A=6.905, B=1211.033, C=220.79
Ethylbenzene						0.1524	0.1282	0.1804	106.1700	0.0001	0.0032	106.17	Option 2: A=6.975, B=1424.255, C=213.21
Hexane (-n)						2.4667	2.1671	2.7992	86.1700	0.0000	0.0004	86.17	Option 2: A=6.876, B=1171.17, C=224.41
Toluene						0.4474	0.3832	0.5204	92.1300	0.0003	0.0230	92.13	Option 2: A=6.954, B=1344.8, C=219.48
Unidentified Components						0.0077	0.0070	0.0074	134.5121	0.9866	0.8635	189.60	
Xylene (-m)						0.1273	0.1069	0.1510	106.1700	0.0029	0.0594	106.17	Option 2: A=7.009, B=1462.266, C=215.11

TANKS 4.0.9d
Emissions Report - Summary Format
Individual Tank Emission Totals

Emissions Report for: Annual

30-88 - Vertical Fixed Roof Tank
Lafourche Parish, Louisiana

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Distillate fuel oil no. 2	0.00	0.02	0.02
Hexane (-n)	0.00	0.00	0.00
Benzene	0.00	0.00	0.00
Toluene	0.00	0.00	0.00
Ethylbenzene	0.00	0.00	0.00
Xylene (-m)	0.00	0.00	0.00
1,2,4-Trimethylbenzene	0.00	0.00	0.00
Unidentified Components	0.00	0.01	0.02

TANKS 4.0.9d
Emissions Report - Summary Format
Tank Indentification and Physical Characteristics

Identification

User Identification:	31-88
City:	Lafourche Parish
State:	Louisiana
Company:	LOOP LLC
Type of Tank:	Vertical Fixed Roof Tank
Description:	Tank 9 Clovelly Day Tank for Generator (Brine Storage Reservoir)

Tank Dimensions

Shell Height (ft):	5.00
Diameter (ft):	2.22
Liquid Height (ft) :	4.00
Avg. Liquid Height (ft):	3.00
Volume (gallons):	115.82
Turnovers:	1.00
Net Throughput(gal/yr):	115.82
Is Tank Heated (y/n):	N

Paint Characteristics

Shell Color/Shade:	White/White
Shell Condition	Good
Roof Color/Shade:	White/White
Roof Condition:	Good

Roof Characteristics

Type:	Cone
Height (ft)	0.00
Slope (ft/ft) (Cone Roof)	0.06

Breather Vent Settings

Vacuum Settings (psig):	0.00
Pressure Settings (psig)	0.00

Meterological Data used in Emissions Calculations: New Orleans, Louisiana (Avg Atmospheric Pressure = 14.75 psia)

TANKS 4.0.9d
Emissions Report - Summary Format
Liquid Contents of Storage Tank

31-88 - Vertical Fixed Roof Tank
Lafourche Parish, Louisiana

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Distillate fuel oil no. 2	All	69.99	64.84	75.14	68.06	0.0090	0.0077	0.0105	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009
1,2,4-Trimethylbenzene						0.0302	0.0247	0.0367	120.1900	0.0100	0.0485	120.19	Option 2: A=7.04383, B=1573.267, C=208.56
Benzene						1.5308	1.3336	1.7516	78.1100	0.0000	0.0020	78.11	Option 2: A=6.905, B=1211.033, C=220.79
Ethylbenzene						0.1524	0.1282	0.1804	106.1700	0.0001	0.0032	106.17	Option 2: A=6.975, B=1424.255, C=213.21
Hexane (-n)						2.4667	2.1671	2.7992	86.1700	0.0000	0.0004	86.17	Option 2: A=6.876, B=1171.17, C=224.41
Toluene						0.4474	0.3832	0.5204	92.1300	0.0003	0.0230	92.13	Option 2: A=6.954, B=1344.8, C=219.48
Unidentified Components						0.0077	0.0070	0.0074	134.5121	0.9866	0.8635	189.60	
Xylene (-m)						0.1273	0.1069	0.1510	106.1700	0.0029	0.0594	106.17	Option 2: A=7.009, B=1462.266, C=215.11

TANKS 4.0.9d
Emissions Report - Summary Format
Individual Tank Emission Totals

Emissions Report for: Annual

31-88 - Vertical Fixed Roof Tank
Lafourche Parish, Louisiana

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Distillate fuel oil no. 2	0.00	0.02	0.03
Hexane (-n)	0.00	0.00	0.00
Benzene	0.00	0.00	0.00
Toluene	0.00	0.00	0.00
Ethylbenzene	0.00	0.00	0.00
Xylene (-m)	0.00	0.00	0.00
1,2,4-Trimethylbenzene	0.00	0.00	0.00
Unidentified Components	0.00	0.02	0.02

TANKS 4.0.9d
Emissions Report - Summary Format
Tank Indentification and Physical Characteristics

Identification

User Identification:	32-88
City:	Lafourche Parish
State:	Louisiana
Company:	LOOP LLC
Type of Tank:	Horizontal Tank
Description:	Tank 10 Clovelly Underground Slop Oil Tank by Lab

Tank Dimensions

Shell Length (ft):		7.00
Diameter (ft):		7.00
Volume (gallons):		2,000.00
Turnovers:		3.00
Net Throughput(gal/yr):		6,000.00
Is Tank Heated (y/n):	N	
Is Tank Underground (y/n):	Y	

Paint Characteristics

Shell Color/Shade:	
Shell Condition	

Breather Vent Settings

Vacuum Settings (psig):	0.00
Pressure Settings (psig)	0.00

Meterological Data used in Emissions Calculations: New Orleans, Louisiana (Avg Atmospheric Pressure = 14.75 psia)

TANKS 4.0.9d
Emissions Report - Summary Format
Liquid Contents of Storage Tank

32-88 - Horizontal Tank
Lafourche Parish, Louisiana

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Crude oil (RVP 5)	All	67.48	67.48	67.48	67.04	3.3261	3.3261	3.3261	50.0000			207.00	Option 4: RVP=5
1,2,4-Trimethylbenzene						0.0274	0.0274	0.0274	120.1900	0.0033	0.0001	120.19	Option 2: A=7.04383, B=1573.267, C=208.56
2,2,4-Trimethylpentane (isooctane)						0.7362	0.7362	0.7362	114.2300	0.0010	0.0009	114.23	Option 2: A=6.8118, B=1257.84, C=220.74
Benzene						1.4319	1.4319	1.4319	78.1100	0.0060	0.0107	78.11	Option 2: A=6.905, B=1211.033, C=220.79
Cyclohexane						1.4783	1.4783	1.4783	84.1600	0.0070	0.0129	84.16	Option 2: A=6.841, B=1201.53, C=222.65
Ethylbenzene						0.1402	0.1402	0.1402	106.1700	0.0040	0.0007	106.17	Option 2: A=6.975, B=1424.255, C=213.21
Hexane (-n)						2.3167	2.3167	2.3167	86.1700	0.0040	0.0115	86.17	Option 2: A=6.876, B=1171.17, C=224.41
Isopropyl benzene						0.0633	0.0633	0.0633	120.2000	0.0010	0.0001	120.20	Option 2: A=6.93666, B=1460.793, C=207.78
Toluene						0.4150	0.4150	0.4150	92.1300	0.0100	0.0052	92.13	Option 2: A=6.954, B=1344.8, C=219.48
Unidentified Components						3.6389	3.6284	3.6389	49.0580	0.9497	0.9559	220.76	
Xylene (-m)						0.1170	0.1170	0.1170	106.1700	0.0140	0.0020	106.17	Option 2: A=7.009, B=1462.266, C=215.11

TANKS 4.0.9d
Emissions Report - Summary Format
Individual Tank Emission Totals

Emissions Report for: Annual

32-88 - Horizontal Tank
Lafourche Parish, Louisiana

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Crude oil (RVP 5)	17.82	0.00	17.82
Hexane (-n)	0.21	0.00	0.21
2,2,4-Trimethylpentane (isooctane)	0.02	0.00	0.02
Benzene	0.19	0.00	0.19
1,2,4-Trimethylbenzene	0.00	0.00	0.00
Cyclohexane	0.23	0.00	0.23
Ethylbenzene	0.01	0.00	0.01
Isopropyl benzene	0.00	0.00	0.00
Xylene (-m)	0.04	0.00	0.04
Toluene	0.09	0.00	0.09
Unidentified Components	17.03	0.00	17.03

TANKS 4.0.9d
Emissions Report - Summary Format
Tank Indentification and Physical Characteristics

Identification

User Identification:	34-88
City:	Lafourche Parish
State:	Louisiana
Company:	LOOP LLC
Type of Tank:	Horizontal Tank
Description:	Tank 12 Small Boat Harbor Diesel Tank

Tank Dimensions

Shell Length (ft):	5.00
Diameter (ft):	3.00
Volume (gallons):	260.00
Turnovers:	1.00
Net Throughput(gal/yr):	260.00
Is Tank Heated (y/n):	N
Is Tank Underground (y/n):	N

Paint Characteristics

Shell Color/Shade:	White/White
Shell Condition	Good

Breather Vent Settings

Vacuum Settings (psig):	0.00
Pressure Settings (psig)	0.00

Meterological Data used in Emissions Calculations: New Orleans, Louisiana (Avg Atmospheric Pressure = 14.75 psia)

TANKS 4.0.9d
Emissions Report - Summary Format
Liquid Contents of Storage Tank

34-88 - Horizontal Tank
Lafourche Parish, Louisiana

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Distillate fuel oil no. 2	All	69.99	64.84	75.14	68.06	0.0090	0.0077	0.0105	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009
1,2,4-Trimethylbenzene						0.0302	0.0247	0.0367	120.1900	0.0100	0.0485	120.19	Option 2: A=7.04383, B=1573.267, C=208.56
Benzene						1.5308	1.3336	1.7516	78.1100	0.0000	0.0020	78.11	Option 2: A=6.905, B=1211.033, C=220.79
Ethylbenzene						0.1524	0.1282	0.1804	106.1700	0.0001	0.0032	106.17	Option 2: A=6.975, B=1424.255, C=213.21
Hexane (-n)						2.4667	2.1671	2.7992	86.1700	0.0000	0.0004	86.17	Option 2: A=6.876, B=1171.17, C=224.41
Toluene						0.4474	0.3832	0.5204	92.1300	0.0003	0.0230	92.13	Option 2: A=6.954, B=1344.8, C=219.48
Unidentified Components						0.0077	0.0070	0.0074	134.5121	0.9866	0.8635	189.60	
Xylene (-m)						0.1273	0.1069	0.1510	106.1700	0.0029	0.0594	106.17	Option 2: A=7.009, B=1462.266, C=215.11

TANKS 4.0.9d
Emissions Report - Summary Format
Individual Tank Emission Totals

Emissions Report for: Annual

34-88 - Horizontal Tank
Lafourche Parish, Louisiana

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Distillate fuel oil no. 2	0.01	0.07	0.07
Hexane (-n)	0.00	0.00	0.00
Benzene	0.00	0.00	0.00
Toluene	0.00	0.00	0.00
Ethylbenzene	0.00	0.00	0.00
Xylene (-m)	0.00	0.00	0.00
1,2,4-Trimethylbenzene	0.00	0.00	0.00
Unidentified Components	0.01	0.06	0.06

TANKS 4.0.9d
Emissions Report - Summary Format
Tank Indentification and Physical Characteristics

Identification

User Identification:	36-89
City:	Lafourche Parish
State:	Louisiana
Company:	LOOP LLC
Type of Tank:	Vertical Fixed Roof Tank
Description:	Day Tank for Operations Center Standby Generator

Tank Dimensions

Shell Height (ft):	5.00
Diameter (ft):	2.00
Liquid Height (ft) :	4.00
Avg. Liquid Height (ft):	3.00
Volume (gallons):	94.00
Turnovers:	17.02
Net Throughput(gal/yr):	1,600.00
Is Tank Heated (y/n):	N

Paint Characteristics

Shell Color/Shade:	White/White
Shell Condition	Good
Roof Color/Shade:	White/White
Roof Condition:	Good

Roof Characteristics

Type:	Cone
Height (ft)	0.00
Slope (ft/ft) (Cone Roof)	0.06

Breather Vent Settings

Vacuum Settings (psig):	0.00
Pressure Settings (psig)	0.00

Meterological Data used in Emissions Calculations: New Orleans, Louisiana (Avg Atmospheric Pressure = 14.75 psia)

TANKS 4.0.9d
Emissions Report - Summary Format
Liquid Contents of Storage Tank

36-89 - Vertical Fixed Roof Tank
Lafourche Parish, Louisiana

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Distillate fuel oil no. 2	All	69.99	64.84	75.14	68.06	0.0090	0.0077	0.0105	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009
1,2,4-Trimethylbenzene						0.0302	0.0247	0.0367	120.1900	0.0100	0.0485	120.19	Option 2: A=7.04383, B=1573.267, C=208.56
Benzene						1.5308	1.3336	1.7516	78.1100	0.0000	0.0020	78.11	Option 2: A=6.905, B=1211.033, C=220.79
Ethylbenzene						0.1524	0.1282	0.1804	106.1700	0.0001	0.0032	106.17	Option 2: A=6.975, B=1424.255, C=213.21
Hexane (-n)						2.4667	2.1671	2.7992	86.1700	0.0000	0.0004	86.17	Option 2: A=6.876, B=1171.17, C=224.41
Toluene						0.4474	0.3832	0.5204	92.1300	0.0003	0.0230	92.13	Option 2: A=6.954, B=1344.8, C=219.48
Unidentified Components						0.0077	0.0070	0.0074	134.5121	0.9866	0.8635	189.60	
Xylene (-m)						0.1273	0.1069	0.1510	106.1700	0.0029	0.0594	106.17	Option 2: A=7.009, B=1462.266, C=215.11

TANKS 4.0.9d
Emissions Report - Summary Format
Individual Tank Emission Totals

Emissions Report for: Annual

36-89 - Vertical Fixed Roof Tank
Lafourche Parish, Louisiana

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Distillate fuel oil no. 2	0.04	0.02	0.06
Hexane (-n)	0.00	0.00	0.00
Benzene	0.00	0.00	0.00
Toluene	0.00	0.00	0.00
Ethylbenzene	0.00	0.00	0.00
Xylene (-m)	0.00	0.00	0.00
1,2,4-Trimethylbenzene	0.00	0.00	0.00
Unidentified Components	0.04	0.02	0.05

TANKS 4.0.9d
Emissions Report - Summary Format
Tank Indentification and Physical Characteristics

Identification

User Identification:	37-91
City:	Lafourche Parish
State:	Louisiana
Company:	LOOP LLC
Type of Tank:	Horizontal Tank
Description:	Small Boat Harbor Diesel Tank

Tank Dimensions

Shell Length (ft):	6.00
Diameter (ft):	4.00
Volume (gallons):	564.00
Turnovers:	4.00
Net Throughput(gal/yr):	2,256.00
Is Tank Heated (y/n):	N
Is Tank Underground (y/n):	N

Paint Characteristics

Shell Color/Shade:	White/White
Shell Condition	Good

Breather Vent Settings

Vacuum Settings (psig):	0.00
Pressure Settings (psig)	0.00

Meterological Data used in Emissions Calculations: New Orleans, Louisiana (Avg Atmospheric Pressure = 14.75 psia)

TANKS 4.0.9d
Emissions Report - Summary Format
Liquid Contents of Storage Tank

37-91 - Horizontal Tank
Lafourche Parish, Louisiana

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Distillate fuel oil no. 2	All	69.99	64.84	75.14	68.06	0.0090	0.0077	0.0105	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009
1,2,4-Trimethylbenzene						0.0302	0.0247	0.0367	120.1900	0.0100	0.0485	120.19	Option 2: A=7.04383, B=1573.267, C=208.56
Benzene						1.5308	1.3336	1.7516	78.1100	0.0000	0.0020	78.11	Option 2: A=6.905, B=1211.033, C=220.79
Ethylbenzene						0.1524	0.1282	0.1804	106.1700	0.0001	0.0032	106.17	Option 2: A=6.975, B=1424.255, C=213.21
Hexane (-n)						2.4667	2.1671	2.7992	86.1700	0.0000	0.0004	86.17	Option 2: A=6.876, B=1171.17, C=224.41
Toluene						0.4474	0.3832	0.5204	92.1300	0.0003	0.0230	92.13	Option 2: A=6.954, B=1344.8, C=219.48
Unidentified Components						0.0077	0.0070	0.0074	134.5121	0.9866	0.8635	189.60	
Xylene (-m)						0.1273	0.1069	0.1510	106.1700	0.0029	0.0594	106.17	Option 2: A=7.009, B=1462.266, C=215.11

TANKS 4.0.9d
Emissions Report - Summary Format
Individual Tank Emission Totals

Emissions Report for: Annual

37-91 - Horizontal Tank
Lafourche Parish, Louisiana

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Distillate fuel oil no. 2	0.06	0.14	0.20
Hexane (-n)	0.00	0.00	0.00
Benzene	0.00	0.00	0.00
Toluene	0.00	0.00	0.00
Ethylbenzene	0.00	0.00	0.00
Xylene (-m)	0.00	0.01	0.01
1,2,4-Trimethylbenzene	0.00	0.01	0.01
Unidentified Components	0.05	0.12	0.18

APPENDIX E

EPA SUBMITTAL LETTER

C-K ASSOCIATES • LLC
ENVIRONMENTAL & ENGINEERING CONSULTANTS

17170 PERKINS ROAD
BATON ROUGE, LA 70810
PH (225) 755-1000
FAX (225) 751-2010
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LAKE CHARLES, LA
PH(337)439-8699
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SHREVEPORT, LA
PH(318) 797-8636
FAX(318) 798-0478

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PH (281) 397-9016
FAX (281) 397-6637

December 20, 2010

Air Permits
U.S. Environmental Protection Agency, Region VI
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

Re: Title V Permit Application
Louisiana State Permit No. 1560-00027-03
LOOP LLC – LOOP LLC Port Complex
Lafourche Parish, Louisiana
LDEQ Agency Interest No. 4634

To Whom It May Concern:

On behalf of LOOP LLC, C-K Associates, LLC submits a copy of the Title V Permit Application on compact disc for the LOOP LLC Port Complex located near Galliano, Lafourche Parish, Louisiana. The facility currently operates under state permit no. 1560-00027-03, issued June 12, 2007.

If you have any questions or require additional information, please contact Cindy Gardner-Leblanc with LOOP LLC at (985) 276-6290 or you may contact me at (225) 755-1000.

Sincerely,

Mark J. Ezell
Air Quality Manager

Enc: As Stated

APPENDIX F

CERTIFICATE OF GOOD STANDING

UNITED STATES OF AMERICA

State of Louisiana

Tom Schedler

SECRETARY OF STATE

As Secretary of State of the State of Louisiana, I do hereby Certify that

LOOP LLC

A limited liability company domiciled in WILMINGTON, DELAWARE,

Filed charter and qualified to do business in this State on October 02, 1996,

I further certify that the records of this Office indicate the company has paid all fees due the Secretary of State, and so far as the Office of the Secretary of State is concerned, is in good standing and is authorized to do business in this State.

I further certify that this certificate is not intended to reflect the financial condition of this company since this information is not available from the records of this Office.

In testimony whereof, I have hereunto set my hand and caused the Seal of my Office to be affixed at the City of Baton Rouge on,

December 6, 2010

Secretary of State

Web GSC

Certificate ID: 10121687#ARK73

To validate this certificate, visit the following web site, go to **Commercial Division**, **Certificate Validation**, then follow the instructions displayed.
www.sos.louisiana.gov